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An Assessment of the Economic Conditions in the City of Battle Creek

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An Assessment of the Economic Conditions in the City of Battle Creek

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This analysis is the first in a series of white papers to investigate the economic challenges and opportunities in the Battle Creek Metropolitan Statistical Area (MSA). W.E. Upjohn Institute staff contributing to the authorship of this white paper are Kathleen Bolter (lead author), Jim Robey, and Gerrit Anderson. Additional Upjohn Institute contributors are Lee Adams, Emily Boyle, Jakki Bungart-Bibb, Ben Damerow, Michael Horrigan, Ben Jones, Amy Meyers, and Claudette Robey.

EXECUTIVE SUMMARY

The city of Battle Creek offers current and future residents many benefits including a lower cost of living, growing health care and manufacturing sectors, and relatively high wages for the region. At the same time, the city of Battle Creek, like many small-sized midwestern cities, faces many challenges. Its workforce is shrinking and aging. Residents lack the educational attainment needed to compete in the twenty-first-century economy. And, economic, social, racial, and ethnic divisions exist within the city. Together, these issues could risk the ability of the City of Battle Creek to reach a new level of competitiveness and attract new residents, businesses, and opportunities to the city. This report reviews trends surrounding these challenges and opportunities to present the City of Battle Creek with a complete assessment of its economic conditions.

Consequently, the report reveals that:

- The populations of both the city of Battle Creek and Calhoun County have declined over the past 10 years. Migration out of the city of Battle Creek accounts for most of this population loss.
- Fewer families with children are living in the city of Battle Creek. As the population under age 18 has declined, the population over age 55 has increased, leading to an aging of the city population.
- Despite some recent improvements, the city of Battle Creek still faces substantial challenges in terms of its human capital. Overall, the city lacks residents with the education and skill levels needed to compete in a twenty-first-century workforce.
- Employment in the city of Battle Creek has improved since the depths of the Great Recession, but it has not made a full recovery. Jobs in health care and manufacturing are responsible for the majority of new jobs created in the city.
- Overall, the median hourly wage for jobs in the Battle Creek MSA is relatively high. However, for individuals living in the city of Battle Creek, median household income is relatively low, and the number of households living in poverty is growing.
- Battle Creek has a larger commuting inflow than outflow, meaning more people commute into the city than commute out of the city for work. Moreover, those commuting to the city tend to be older and have higher earnings.
- Home values in the city of Battle Creek continue to rebound, benefiting homeowners. For those unable to buy a house, affordability of rental units remains an issue.
- Racial and ethnic diversity is growing throughout the city, but inequitable social and economic outcomes remain for city residents based on race and ethnicity.

INTRODUCTION

Like many cities in the manufacturing heartland of the Midwest, the city of Battle Creek faces a unique set of challenges determined by its history and geography. Even after the end of the Great Recession, when most of the country was recovering from high levels of unemployment, small cities like Battle Creek experienced unemployment rates well above the national average. Compounding the issues these cities face, poverty rates have grown and populations have declined, making it difficult to marshal the resources needed to implement necessary reforms. As Battle Creek grapples with an uncertain future, determining the proper course of action to restore economic vitality is critical.

It is for this reason the W.K. Kellogg Foundation has teamed up with the W.E. Upjohn Institute for Employment Research to commission a series of white papers examining the economic conditions within the city of Battle Creek and proposing reforms to help revitalize the economy of the city. “An Assessment of the Economic Conditions in the City of Battle Creek” is the first component of this effort.

The report features a comprehensive overview of ongoing demographic, workforce, housing, social, and economic trends in the city. Frequently the discussion focuses on the health of the city of Battle Creek in the context of Calhoun County and the state of Michigan. At other times, the research focuses on comparing the progress made in Battle Creek to several similar “peer cities.” The peer cities were carefully chosen based on a variety of factors, including an equivalent population size and midwestern geographic orientation. None of the cities contain a major university, but each has a community college or smaller college. Also, none of the cities are state capitals. Using that criteria, the following cities were selected for inclusion as peer cities:

- Altoona, Pennsylvania
- Cleveland, Tennessee
- Dubuque, Iowa
- Jefferson City, Missouri
- Joplin, Missouri
- Lancaster, Pennsylvania
- Midland, Michigan
- Owensboro, Kentucky
- Saginaw, Michigan
- Sheboygan, Wisconsin

Additionally, this assessment draws on a variety of federal data sources, including the American Community Survey (ACS). While the American Community Survey is by far the most comprehensive

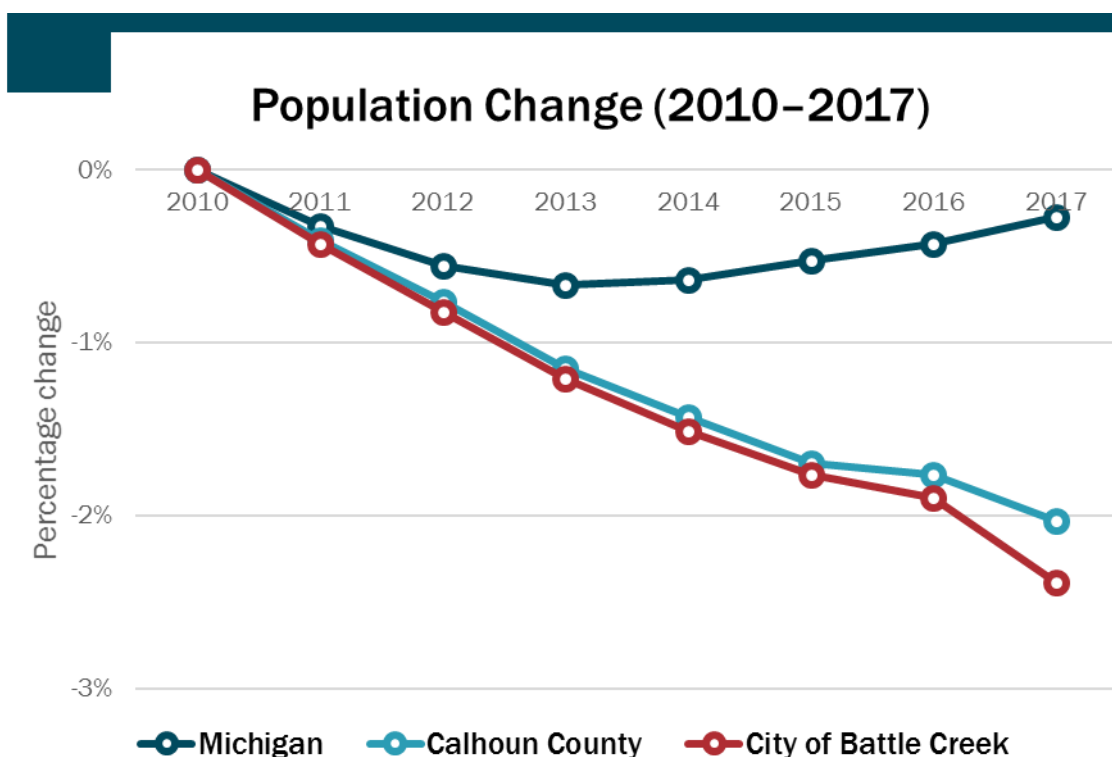
estimate of microgeographic and city-level data, it does come with some limitations. First, because of the size of Battle Creek, the estimates are based on 5-year averages. While larger places have data available for single years in the ACS, Battle Creek is too small and thus must rely on the 5-year averages. The ACS is based on a sample of residents large enough from which to draw conclusions. The implications for this are particularly important when using the absolute values of the indicators. It is likely that some of the indicators improved over the data-collection period, and this improvement is diminished by using the average for 5 years. Therefore, it is best to use these data to examine trends, rather than precise measures of economic conditions at a single point in time. Additionally, because of the way the data are collected and released, the latest year for the data is 2017. The 2018 5-year data will be released at the end of 2019.

This report presents a synthesis of research to provide an overview of the economic conditions within the city of Battle Creek. The pages that follow outline some of the pressure points faced by the city, including low levels of education by residents, high rates of poverty, and an aging population. It serves to establish a baseline for understanding the economic development trends within the city.

1. THE POPULATION

THE TREND: The populations of both the city of Battle Creek and Calhoun County have declined over the past 10 years. Migration out of the city of Battle Creek accounts for most of this population loss.

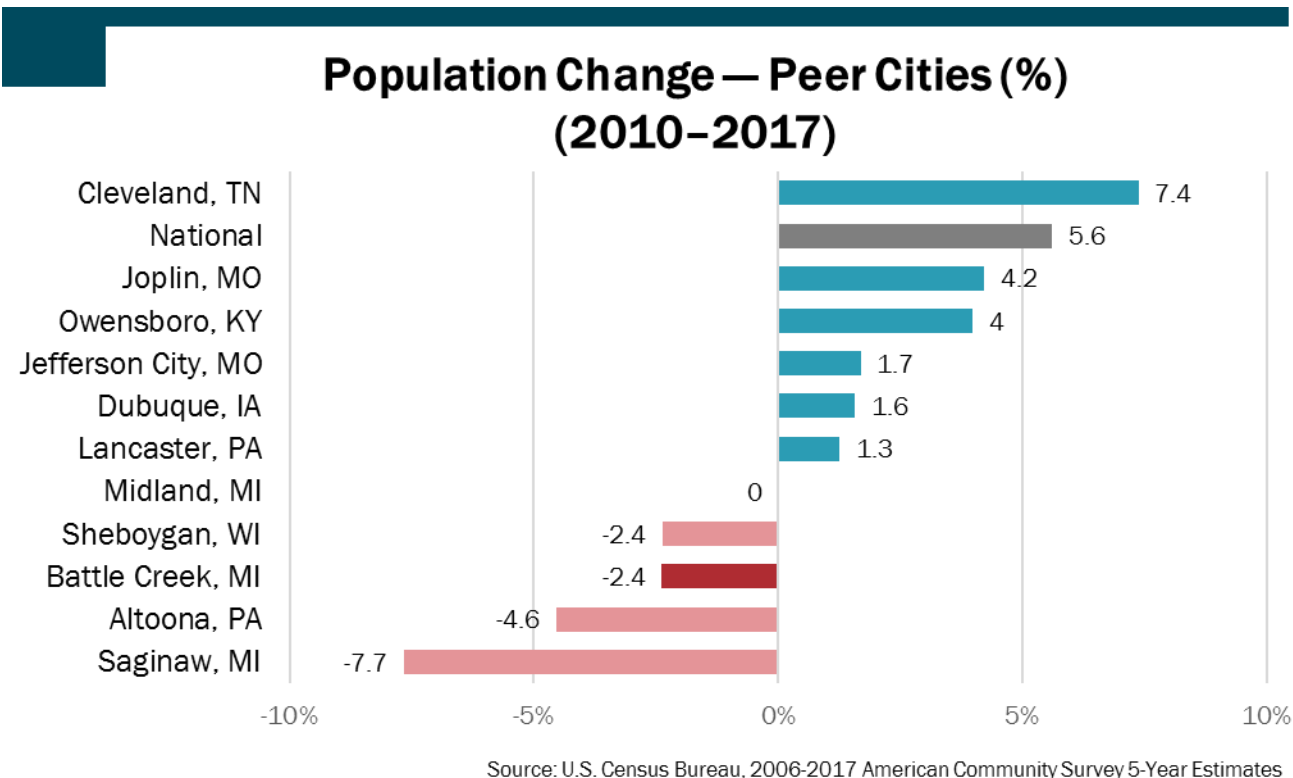
FIGURE 1.1: Population Change (2010–2017)



Source: U.S. Census Bureau, 2006-2017 American Community Survey 5-Year Estimates

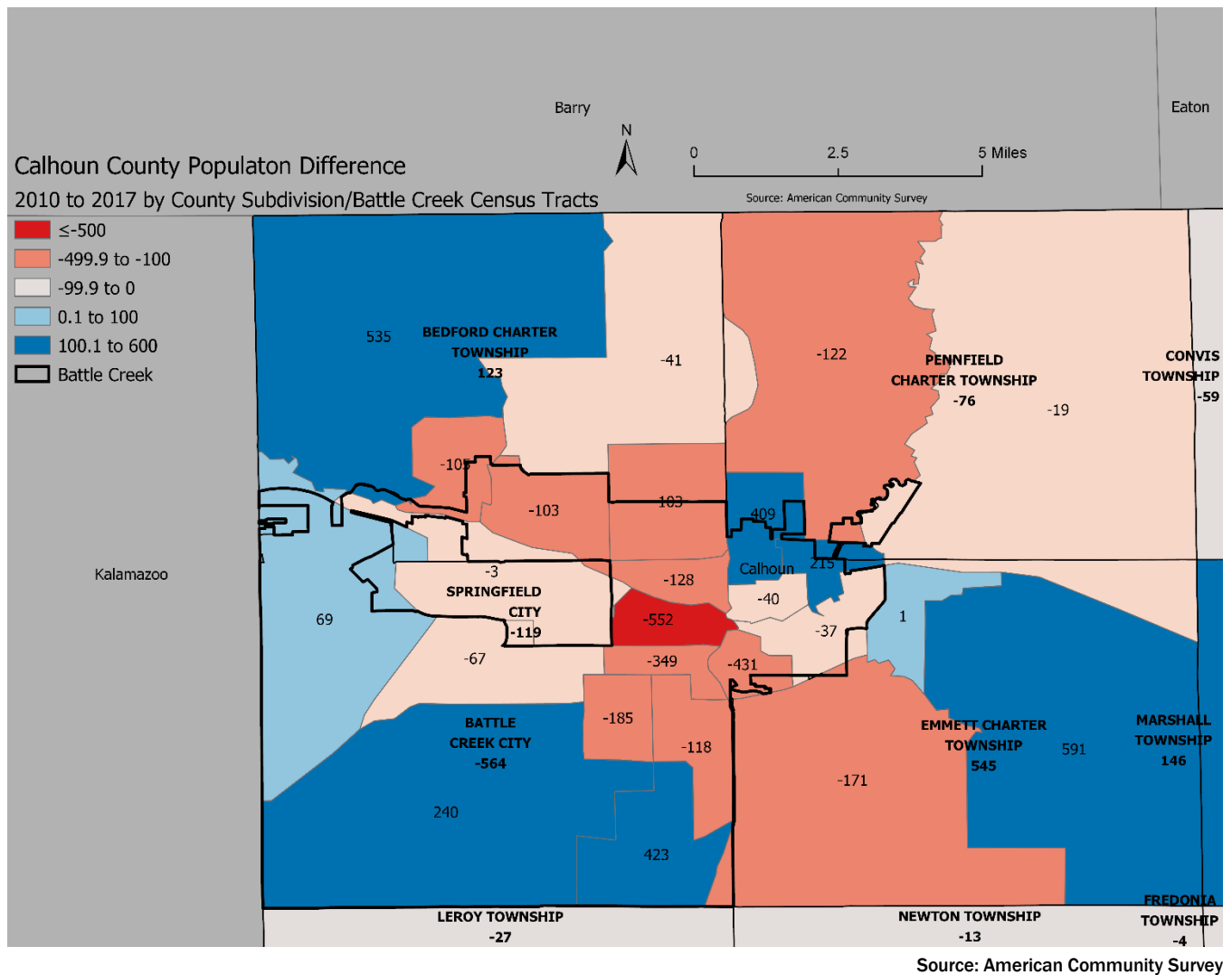
Since 2010, the population in the city of Battle Creek has declined by 2.4 percent. In 2010, the population of Battle Creek was 52,762; by 2017, the population of the city was estimated to be 51,505. As shown in Figure 1.1, this trend closely matches that found in the county, but not in the state. The population of Calhoun County (statistics cited in this paper for Calhoun County include the city of Battle Creek) has declined by 2.0 percent since 2010, while the population of the state of Michigan has declined by less than 1 percent. The population of the state of Michigan has rebounded in recent years, but this is true of neither the county nor the city.

FIGURE 1.2: Population Change—Peer Cities (2010–2017)



Compared to its peer cities, Battle Creek ranks near the bottom in terms of population change. As shown in Figure 1.2, the population of Battle Creek decreased by 2.4 percent, while the average change for its peer cities was a gain of 0.5 percent (not shown) and a gain of 5.6 percent for the nation. Most of the peer cities saw their populations grow during this time period, especially those located in the South. Most of the peer cities located in the Midwest, with economies historically dominated by manufacturing, have faced similar population declines as Battle Creek.

MAP 1.1: Population Change, Calhoun County, by Census Tract (2010–2017)



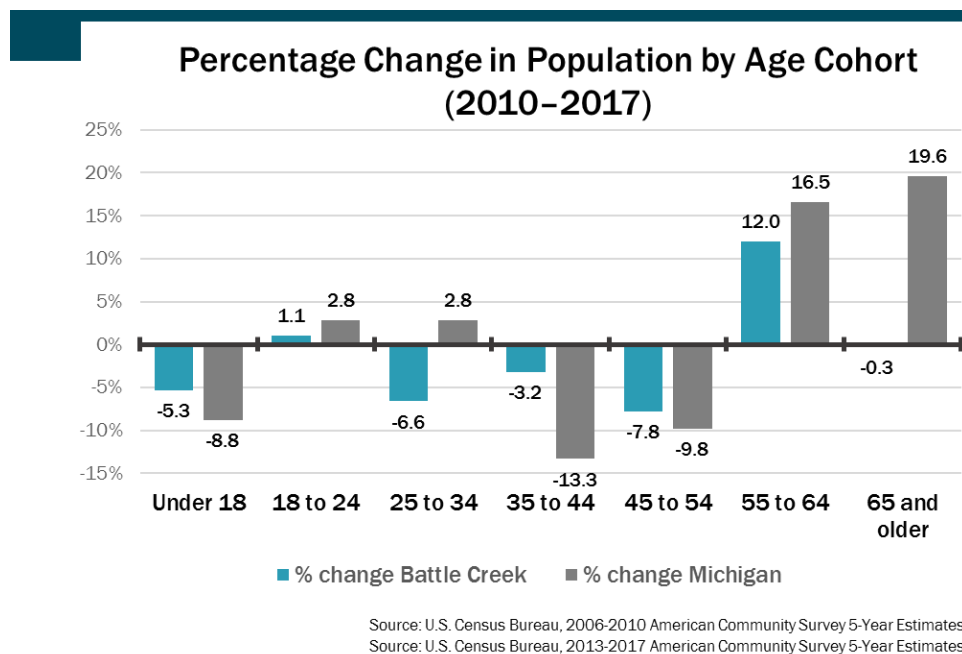
Within the City of Battle Creek, population has significantly decreased in the city center. As Map 1.1 shows, there has been a significant decrease in individuals living adjacent to the downtown area of Battle Creek and a modest increase in individuals living in the southern and western areas of the city. This decentralization of individuals could have implications for traffic congestion and delivery of public services as the dispersion of people toward the outer edges of the city makes the provision of public goods more expensive.

WHAT THIS MEANS: The city of Battle Creek must act to retain its population. A declining population creates many challenges for communities. Population declines are associated with decreased housing prices, slowed economic development, and a declining tax base. All of this leads to less revenue for public assets such as schools, parks, and infrastructure. Battle Creek boasts many assets that should make it an attractive place to live, including a downtown that is being revitalized, ample housing stock, natural and recreational amenities including an attractive parks system and a river that runs through the city, and community investment.

2. AGE AND HOUSEHOLD TYPE

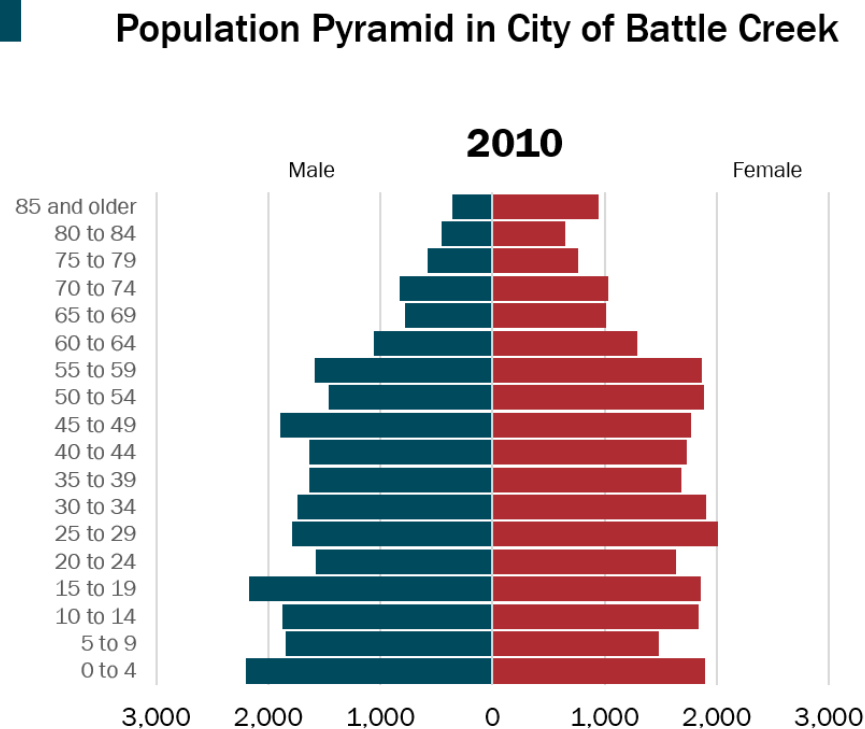
THE TREND: Fewer families with children are living in the city of Battle Creek. As the population under 18 has declined, the population over 55 has increased, leading to an aging of the city population.

FIGURE 2.1: Percentage Change in Population by Age Cohort (2010–2017)

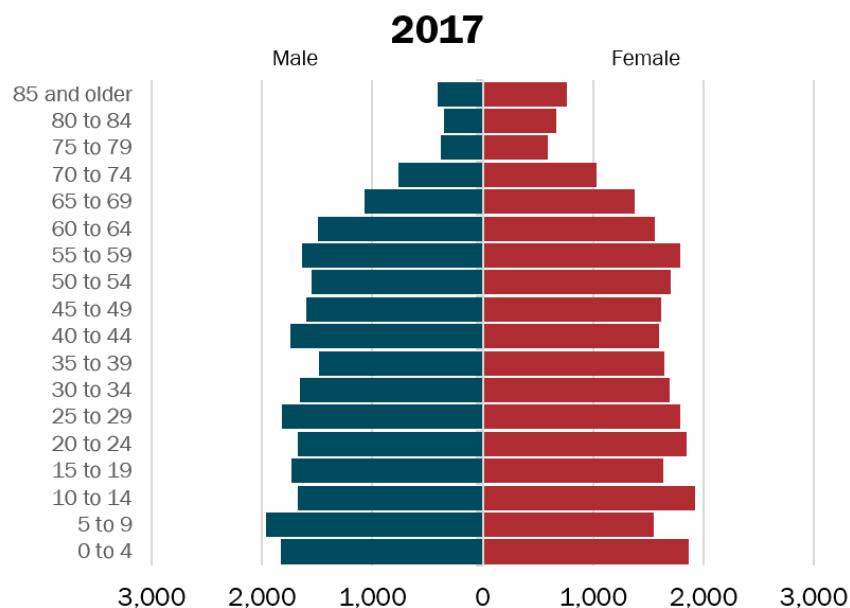


The population is shifting from current and future workers to an older population. As shown in Figure 2.1, individuals aged 55 to 64 have grown the most. This shift may provide challenges for the labor market, as employers continue to struggle to find workers. Additionally, an aging population may create increased demand for services in population-serving sectors of the economy, such as health care and social services. As opposed to the state of Michigan, which saw its population of individuals over the age of 65 increase significantly, Battle Creek saw its population of individuals over age 65 decrease.

FIGURE 2.2: Population Pyramid in the City of Battle Creek



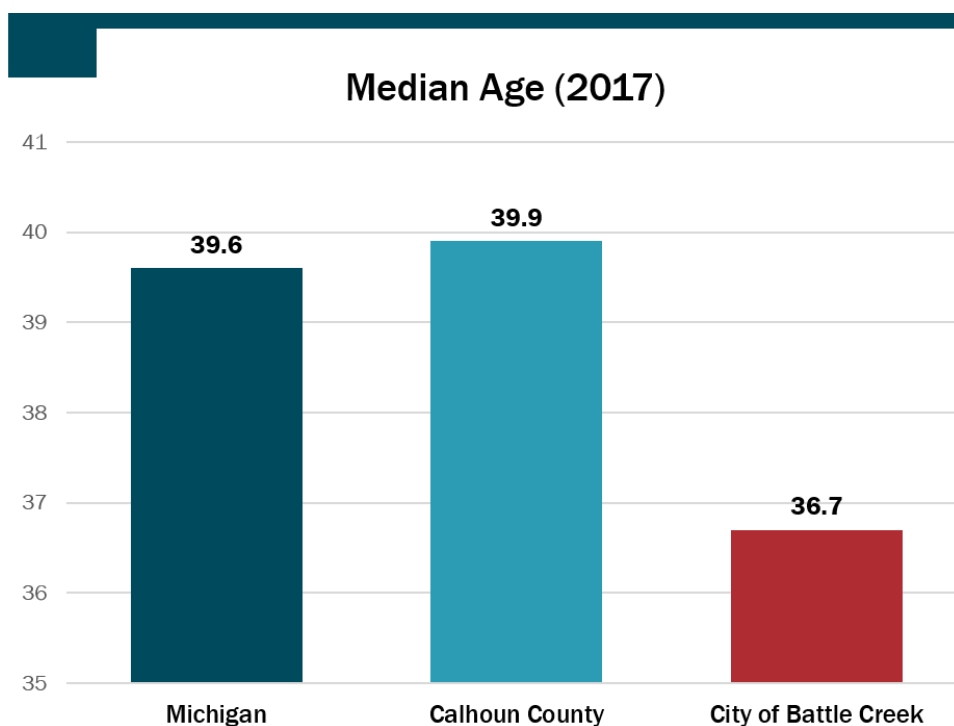
Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Overall, the population appears to be both stabilizing and aging. As shown in Figure 2.2, the more rectangular population pyramid in 2017 suggests the population is stagnating, as a more uniform distribution of ages is shown. The population pyramid also shows the population is aging: Within the city, there has been a small decline in the number of individuals under 18 and a moderate increase in the number of individuals age 55 and older.

FIGURE 2.3: Median Age (2017)

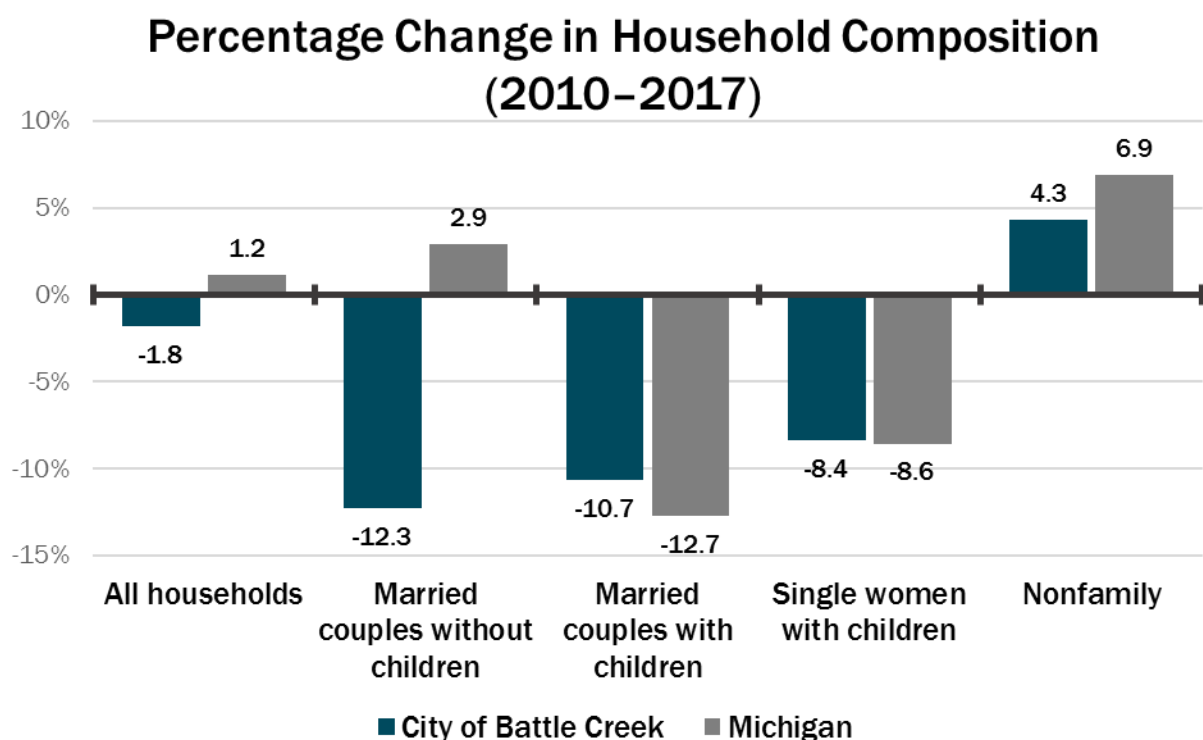


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

The median age in the city of Battle Creek is younger than that of the state or county as a whole.

As shown in Figure 2.3, the median age represents the point at which half the population is older and half younger. Despite having a lower median age, Battle Creek has seen its median age increase from 36 in 2010 to 36.7, as reported in the 2017 ACS. This indicates that the population of the city is aging, albeit slowly.

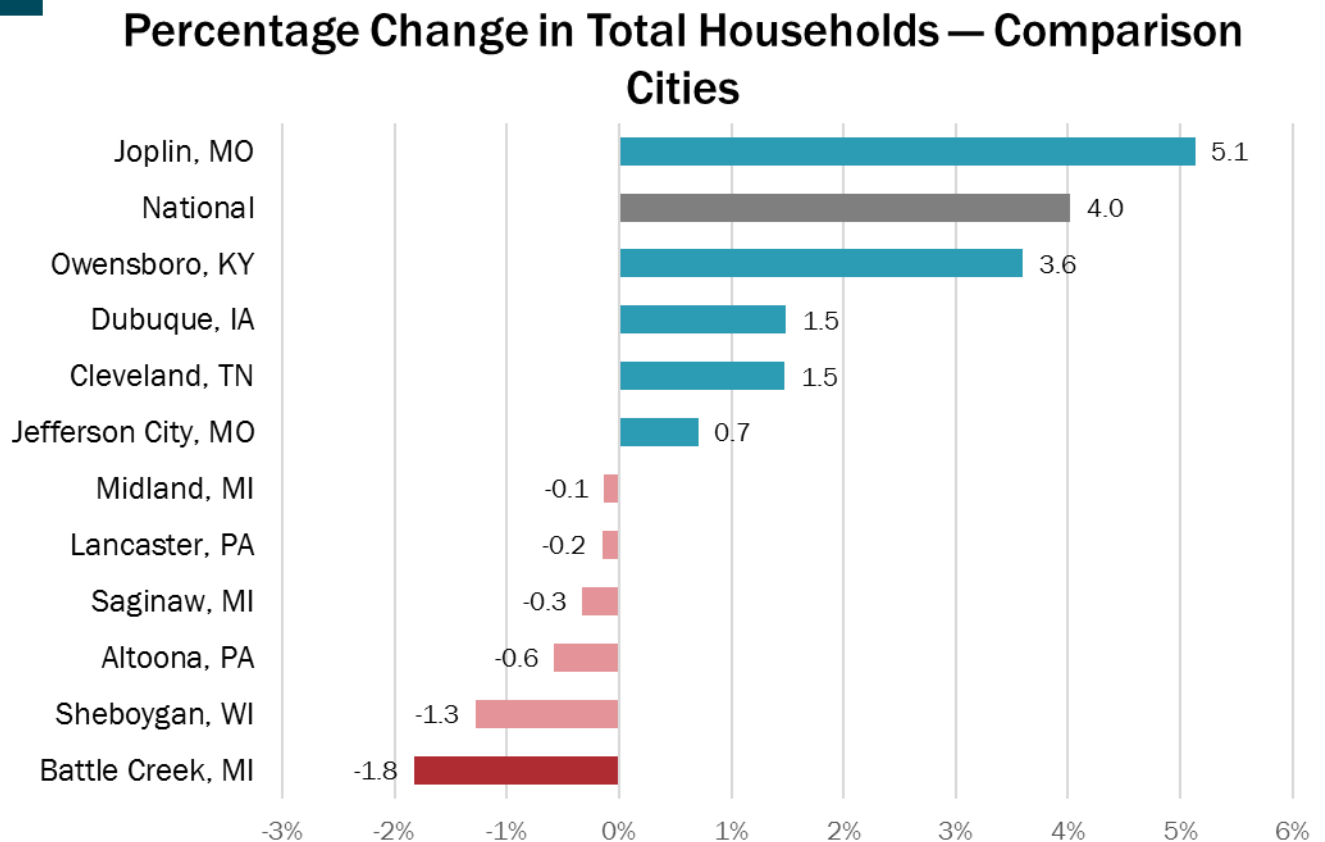
FIGURE 2.4: Percentage Change in Household Composition (2010–2017)



Source: U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates

Overall, the number of households in the city has declined by 384 (1.8 percent). As shown in Figure 2.4, the number of married couples without children decreased 12.3 percent, from 5,038 in 2010 to 4,418 in 2017. The number of married couples with children decreased by 10.7 percent, from 3,382 in 2010 to 3,021 in 2017. Also, the number of single women with children decreased by 8.4 percent, from 2,513 in 2010 to 2,302 in 2017. The only household type to increase has been nonfamily households—those comprised of individuals living alone or with nonrelated roommates. These households saw their numbers increase 4.3 percent, from 7,929 in 2010 to 8,269 in 2017. This is not a unique trend within the city of Battle Creek. Overall, Americans are having fewer children, and when they do, they are having children later in life. Additionally, as the culture in the United States has changed, it has become more socially acceptable to live on one’s own before marriage and to divorce which leads to more single person households. In 2010, the average household size was 2.46; as of 2017, it stood at 2.44, indicating a very small change in the number of people per household.

FIGURE 2.5: Percentage Change in Total Households—Comparison Cities



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Compared to its peer cities, Battle Creek, in percentage terms, has lost the most households. As shown in Figure 2.5, Battle Creek has lost 1.8 percent of its households compared to an average gain of 1.1 percent for its peer cities (not shown) and 4.0 percent nationally. This is likely tied to the overall population decline within the city. However, it is also indicative of a decreasing desire of families to live in the city of Battle Creek. According to the Michigan Department of Health and Human Services, the fertility rate for Battle Creek stands at 68.6 births per 1,000 women aged 15–44. This rate is already much higher than the state of Michigan’s fertility rate of 58.5. While more babies per capita are being born in the city of Battle Creek than in the state as a whole, their families are not necessarily staying and raising them in the city.

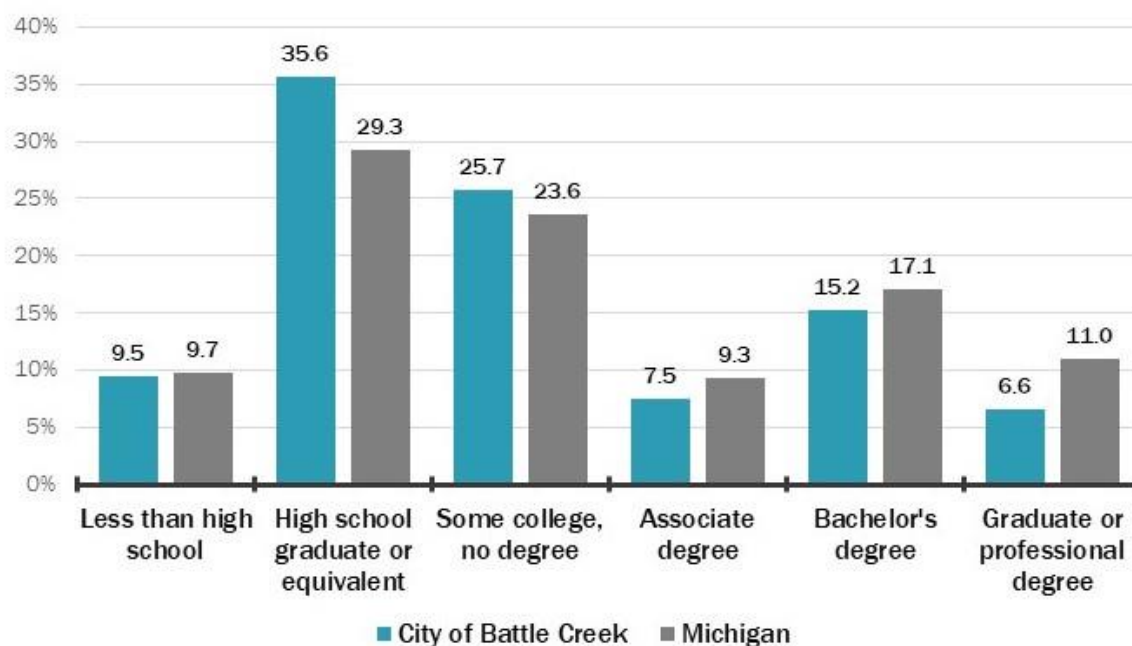
WHAT THIS MEANS: The city of Battle Creek declined in population between 2010 and 2017, as measured by both the number of households and the total population. Fewer people are living in each dwelling unit, and the number of married couples—both those with and those without children—as well as the number of single mothers, has declined. As the population ages and household size shrinks, this may put pressure on the type of homes individuals would like to own: larger homes may become less desirable. Additionally, the aging of the population and the loss of younger workers has the potential to constrain economic growth. The growing population of older individuals in the city may limit the available supply of labor in the future. Without younger workers to take their place in the labor market, as the population of the Battle Creek declines, the city may find it difficult to muster the human capital needed for economic vitality.

3. EDUCATION AND WORKFORCE

THE TREND: Despite some recent improvements, the city of Battle Creek still faces substantial challenges in terms of its human capital. Overall, the city lacks residents with the education and skill levels needed to compete in a twenty-first-century workforce.

Figure 3.1: Educational Attainment of the Population 25 Years or Older (2017)

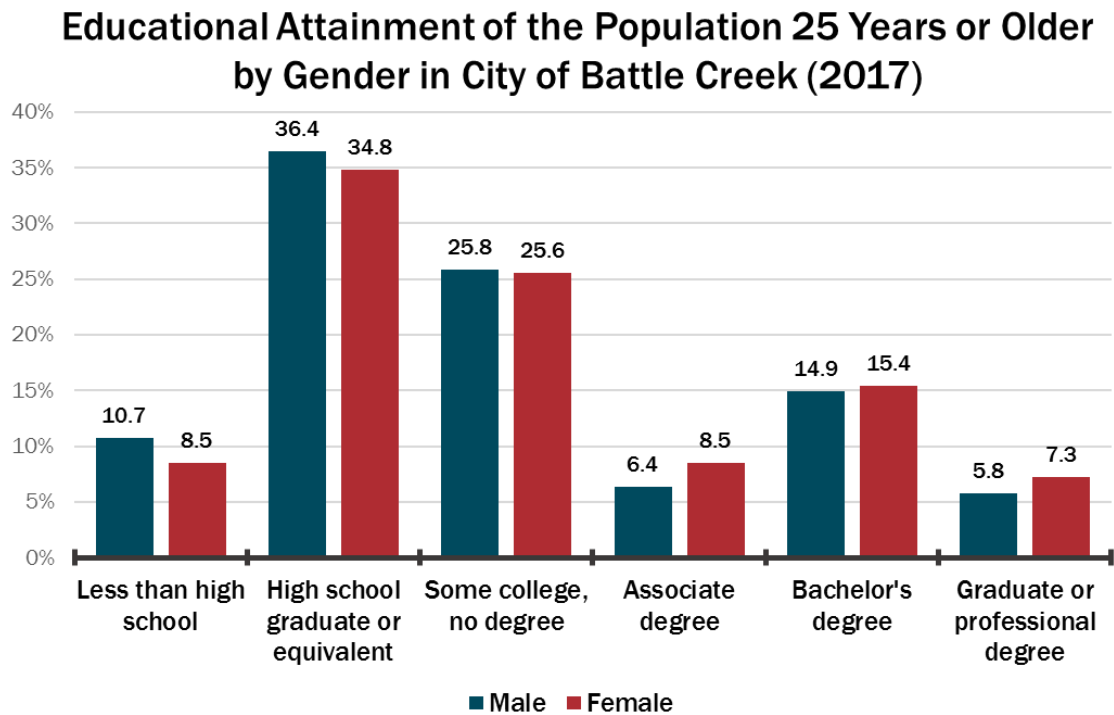
Educational Attainment of the Population 25 Years or Older (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Educational attainment in the city of Battle Creek lags behind that of Michigan. As shown in Figure 3.1, while 28.1 percent of individuals in the state of Michigan have a bachelor's degree or higher, only 21.8 percent of Battle Creek residents do. On a positive note, within the city, the proportion of individuals who have completed high school is roughly the same as the state of Michigan with only 9.5 percent of the adult population of Battle Creek lacking a high school diploma or its equivalent, compared to 9.7 percent of individuals in Michigan. Overall, the numbers indicate that Battle Creek residents are completing high school but not continuing onward to complete some level of a postsecondary degree.

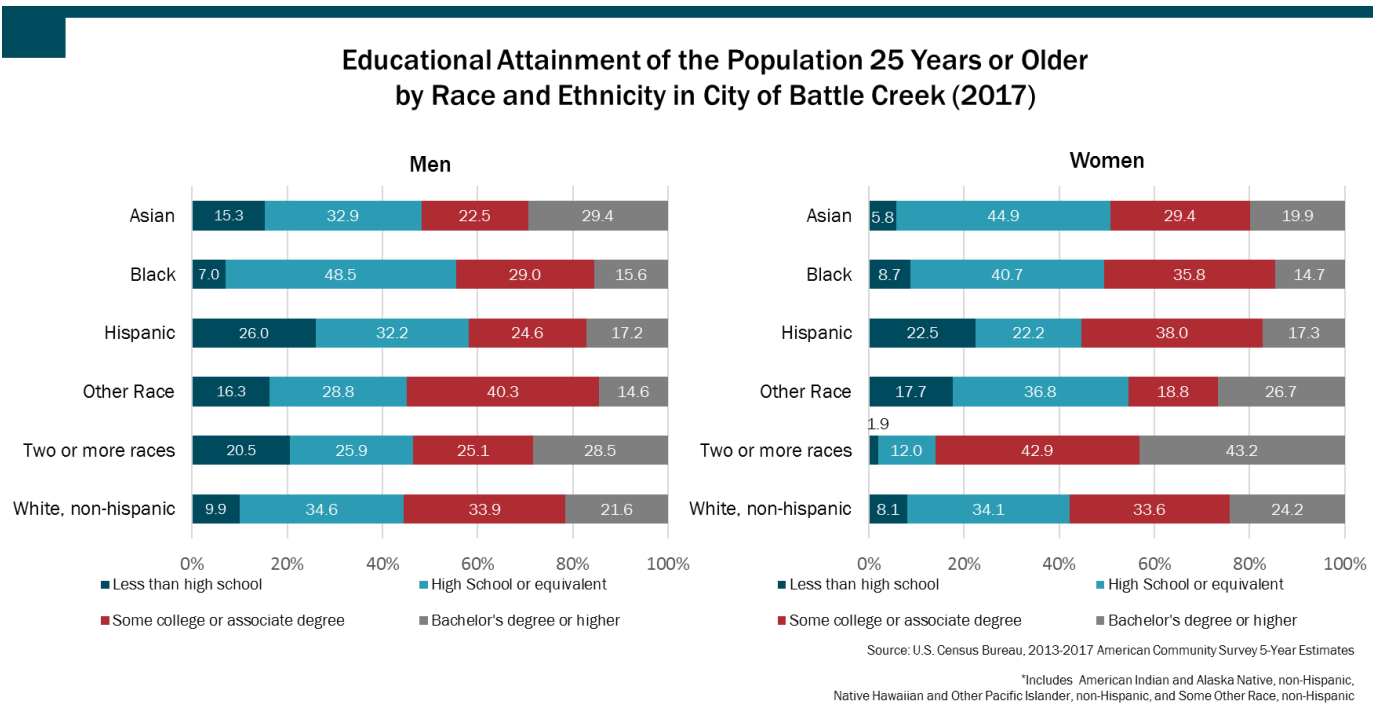
Figure 3.2: Educational Attainment of the Population 25 Years or Older, by Gender, in the City of Battle Creek (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

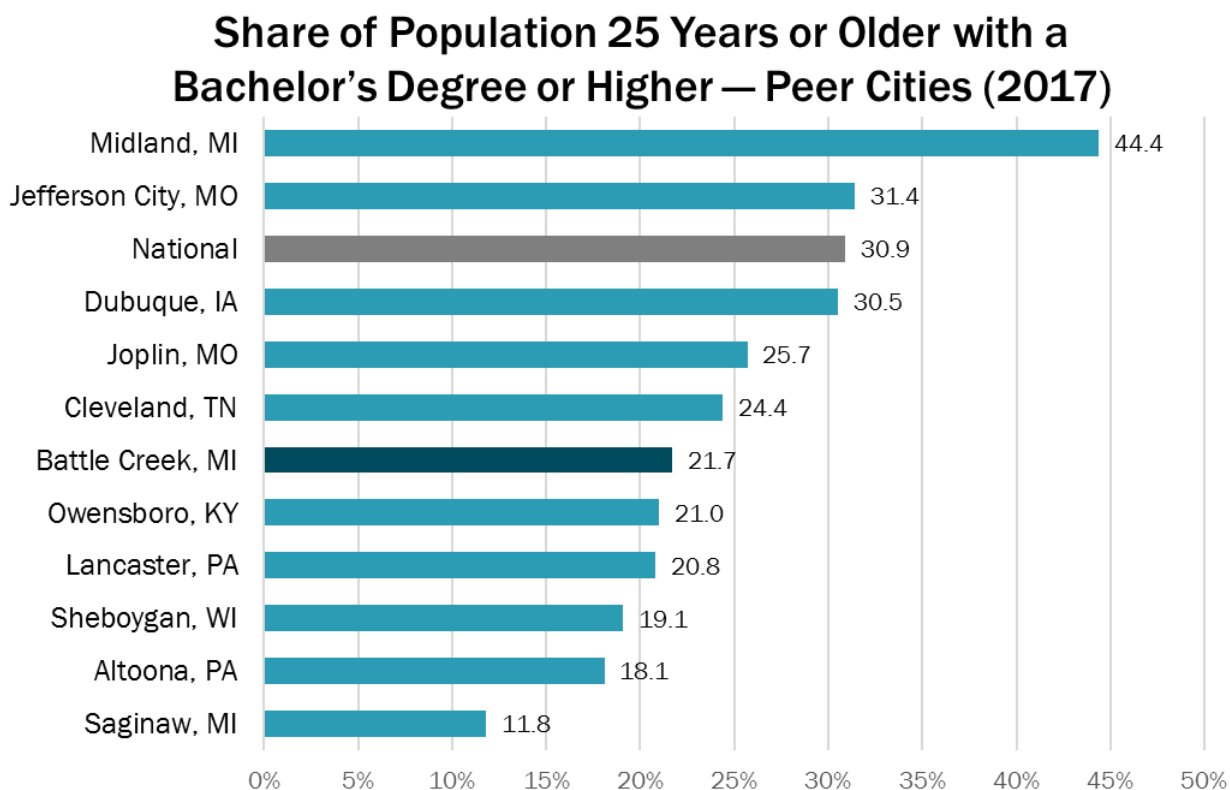
Within the city of Battle Creek, female residents are more likely than their male counterparts to have some postsecondary education. As shown in Figure 3.2, 27.1 percent of men in the city have completed some form of a college degree, compared to 31.2 percent of women. Among city residents, men are more likely not to have completed high school than women.

Figure 3.3: Educational Attainment of the Population 25 Years or Older, by Race and Ethnicity, in the City of Battle Creek (2017)



There are differences in educational attainment between the various racial and ethnic groups within the city of Battle Creek. As shown in Figure 3.3, those identifying as Asian, as two or more races, or as White non-Hispanic are more likely to have a bachelor’s degree than those who are Black, Hispanic, or identify as “Other.” Black men in the city of Battle Creek are the group most likely to have a high school degree or equivalent as their highest educational attainment, while Hispanic men are the group least likely to have graduated from high school.

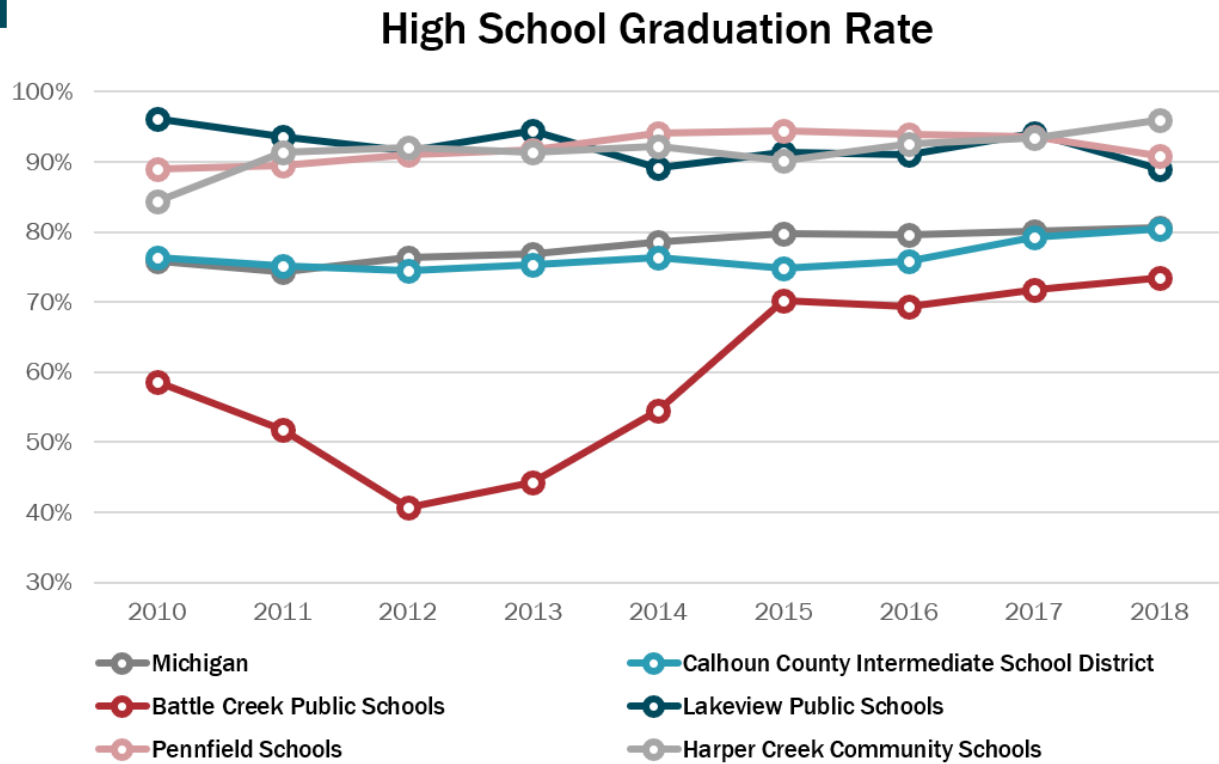
Figure 3.4: Share of Population 25 Years or Older with a Bachelor's Degree or Higher—Peer Cities (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Despite improvements, the City of Battle Creek (as with most of its peer cities) trails behind national rates of population with a bachelor's degree attainment. As shown in Figure 3.4, only 21.7 percent of Battle Creek residents have a bachelor's degree or higher. While the proportion of Battle Creek residents that hold a bachelor's degree or higher has increased from 18.3 percent in 2010 to 21.7 percent in 2017, that rate is still only in the middle of the group when compared to peer cities. Similarly, while the percentage of adults aged 25 and over who are high school graduates has improved to 90.5 percent, up from 86.2 percent in 1990, Battle Creek remains firmly in the middle of its peer cities. Increasing the number of individuals completing some form of postsecondary education is an important component of developing a competitive workforce.

Figure 3.5: High School Graduation Rate



Source: MI School Data, 2019

Despite rapid advancements, Battle Creek Public Schools continue to have a lower high school graduation rate than all of Calhoun County (including the city of Battle Creek) or the state of Michigan. In comparison, Lakeview Public Schools consistently have a higher high school graduation rate. As shown in Figure 3.5, 73.4 percent of Battle Creek Public School students, 89.0 percent of Lakeview students, 96.0 percent of Harper Creek students, and 90.8 percent of Pennfield students had graduated from high school within four years, compared to 80.5 percent of students in all Calhoun County schools and 80.6 percent of all students in Michigan schools. Lower levels of high school graduation create issues for developing a talent pipeline within the city of Battle Creek, as individuals are not reaching a basic and necessary standard of education. Among those that do graduate from Battle Creek Public Schools, 71.8 percent continue onward to enroll in a postsecondary degree program. The number of high school graduates continuing their education is on par with the 71.6 percent state average. However, while 33.6 percent of high school graduates within the state of Michigan (and 35.9 percent of Lakeview graduates, 30.47 percent of Harper Creek graduates, and 36.0 percent of Pennfield graduates) earn a two-year or four-year degree within six years of graduating from high school, only 16.3 percent of Battle Creek Public School graduates finish their degree within this time.

Table 3.1: High School Graduation Rate by School District

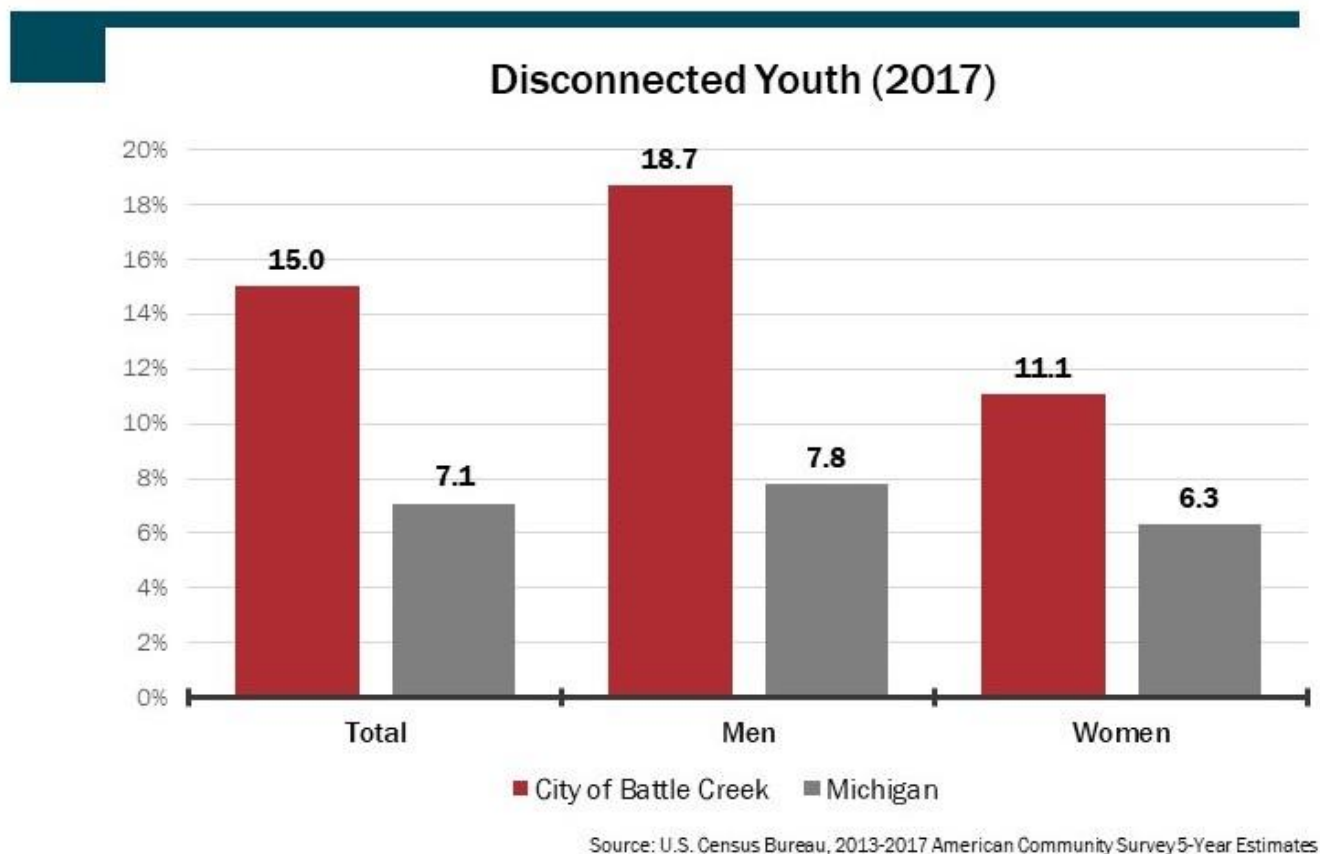
High School Graduation Rate by School District

Sector	2011		2015		2018	
	total	%	total	%	total	%
State of Michigan	100,096	74.3%	97,773	79.7%	98,583	80.6%
Calhoun County Intermediate School District	1448	75.3%	1439	74.9%	1499	80.5%
Albion Public Schools	49	56.3%	<10	N/A	N/A	N/A
Athens Area Schools	51	91.1%	35	87.5%	41	91.1%
Battle Creek Public Schools	212	51.8%	239	70.3%	207	73.4%
Bellevue Community Schools	44	77.2%	26	74.3%	40	93.0%
Harper Creek Community Schools	199	86.1%	185	90.2%	169	96.0%
Homer Community School District	57	75.0%	72	91.1%	64	91.4%
Lakeview School District	294	93.6%	275	91.4%	311	92.3%
Marshall Public Schools	182	82.4%	223	56.7%	248	61.8%
Olivet Community Schools	87	87.0%	102	94.4%	122	92.4%
Pennfield Schools	144	89.4%	135	94.4%	158	90.8%
Tekonsha Community Schools	21	91.3%	19	86.4%	11	64.7%
Union City Community Schools	70	93.3%	71	93.4%	69	86.3%
Battle Creek Area Learning Center	17	20.2%	33	39.8%	36	50.0%
Marshall Academy	11	91.7%	14	87.5%	13	86.7%
Calhoun Intermediate School District - District created from ISD	<10	N/A	<10	N/A	<10	N/A

Source: MI School Data, 2019

Compared to other schools in the Calhoun County Intermediate School District, Battle Creek Public Schools consistently has one of the lowest high school graduation rates, while the Lakeview School District consistently has one of the highest high school graduation rates. As seen in Table 3.1, blue colored squares represent a graduation rate at least 5 percentage points higher than the state of Michigan, while red colored squares represent a graduation rate at least 5 percentage points lower than the state of Michigan. In 2017, a study by the Metropolitan Center for Research on Equity and the Transformation of Schools at New York University found that racial and socioeconomic divisions within the community, compounded by Michigan's 2003 Schools of Choice law have worked to disadvantage the Battle Creek Public School system. While the Battle Creek Public School system has been improving, it remains well below the state average.

Figure 3.6: Disconnected Youth (2017)



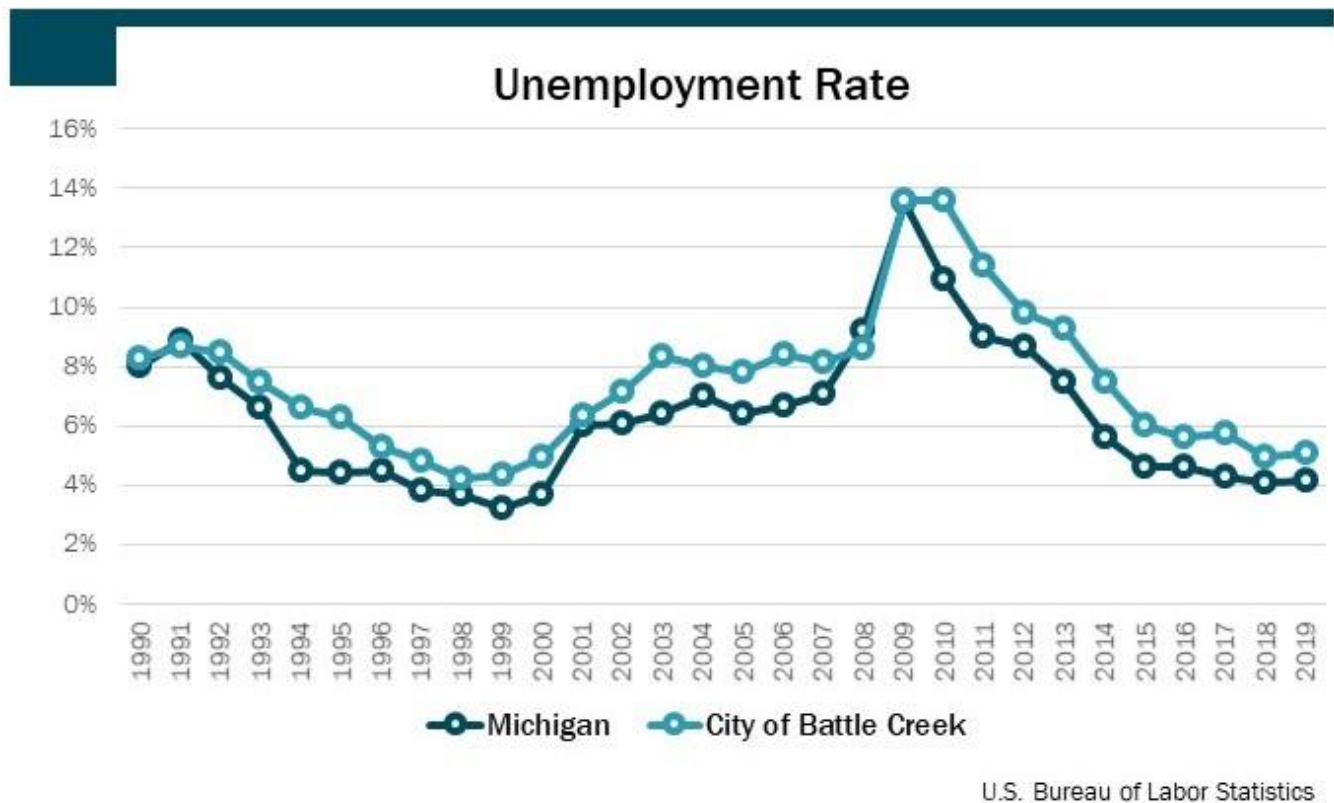
Within the city of Battle Creek, roughly one in seven (15.0 percent) of young people aged 16 to 19 are neither working nor in school. As young people drop out of school and fail to complete basic educational requirements, these disconnected youth become a major issue for Battle Creek. As Figure 3.6 shows, young men within the city of Battle Creek are almost twice as likely to be disconnected as young women (18.7 percent vs. 11.1 percent). Disconnected youth are more likely than nondisconnected youth to face persistent poverty, languish in unemployment, engage in criminal behavior, have substance abuse issues, or be incarcerated. According to Measure of America of the Social Science Research Council (2012), failing to address this issue of disconnectedness becomes a self-perpetuating cycle, as the children of individuals who were disconnected in their youth face similar outcomes as did their parents.

WHAT THIS MEANS: The city's low education levels constrain the competitiveness of the economy of Battle Creek. While progress has been made in increasing the high school graduation rate, the city's overall education and skill levels pose an obstacle to creating and attracting high-paying jobs within the "knowledge economy." Working to build a city where talented and highly educated people want to live will be essential to the success of Battle Creek. At present, without sustained efforts to upgrade the educational attainment of its homegrown workforce and attract highly skilled workers from elsewhere, the city of Battle Creek may face serious economic issues. Recently, the W.K. Kellogg Foundation has instituted investment in the school district in order to address many of these issues.

4. EMPLOYMENT

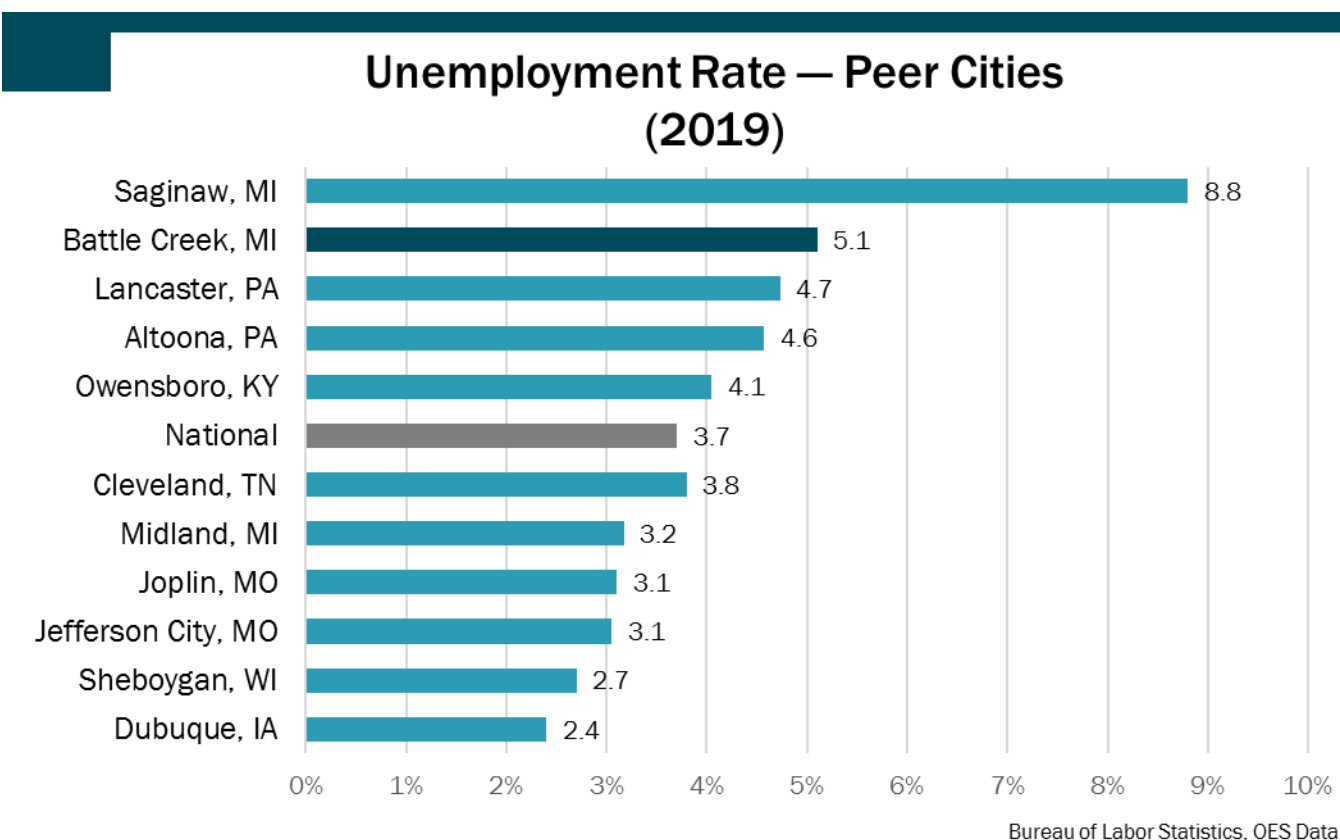
THE TREND: Employment in the city of Battle Creek has improved since the depths of the Great Recession, but it has not made a full recovery. Jobs in health care and manufacturing are responsible for the majority of new jobs created in the city.

Figure 4.1: Unemployment Rate



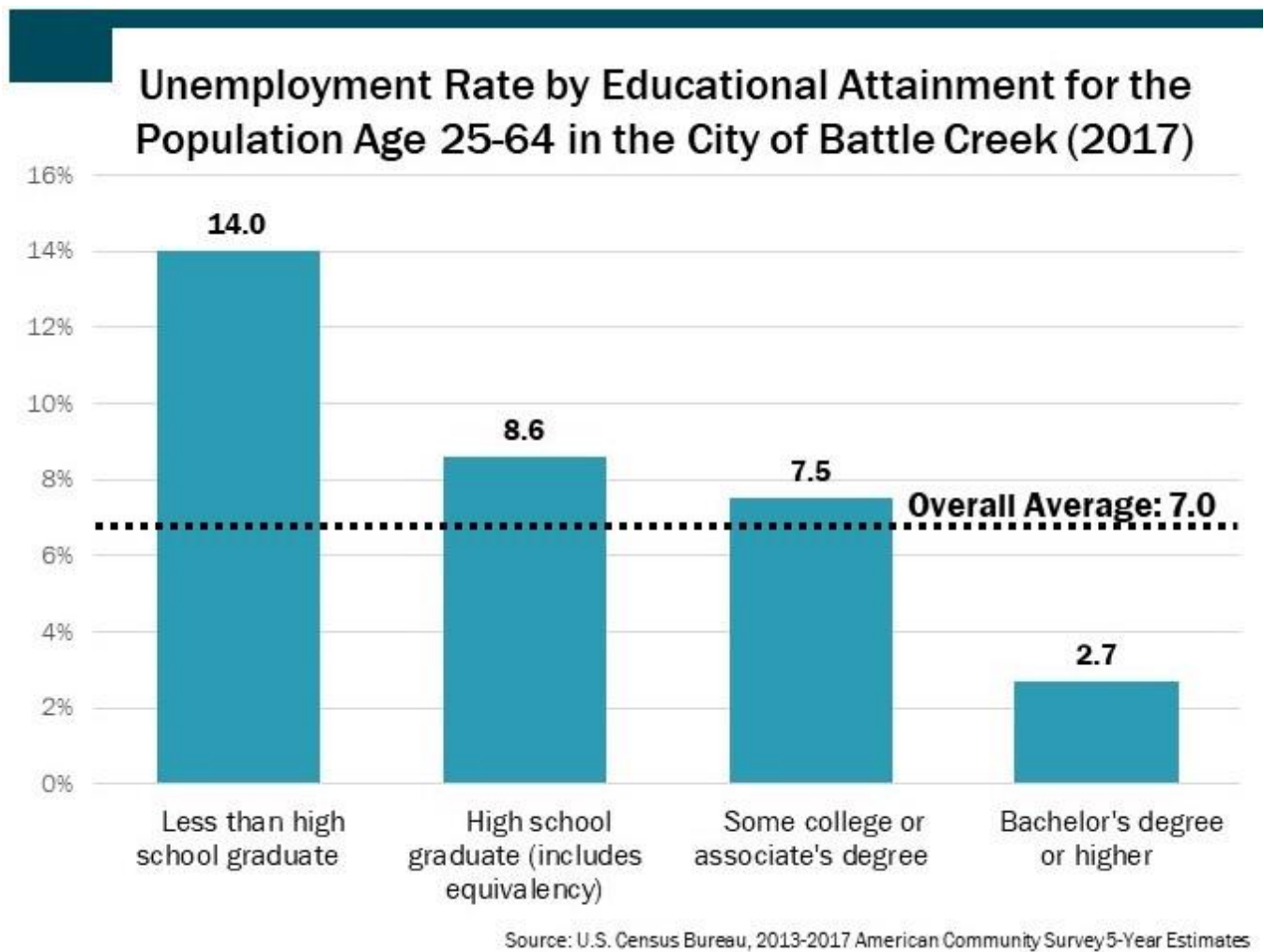
The city of Battle Creek has a lower unemployment rate today than it did prior to the Great Recession. The unemployment rate measures the share of the labor force lacking a job but actively looking for work. According to the Bureau of Labor Statistics, in August of 2019, the unemployment rate in Battle Creek was 5.0 percent. This is significantly lower than in January of 2010, when unemployment peaked at 10.2 percent at the beginning of the recovery. As shown in Figure 4.1, despite the improving employment situation, the City of Battle Creek continues to have a higher unemployment rate than the state of Michigan, although the city is generally following Michigan's pattern of declining unemployment.

Figure 4.2: Unemployment Rate—Peer Cities (2019)



Compared to its peer cities, Battle Creek has a relatively high unemployment rate. As shown in Figure 4.2, Battle Creek had an unemployment rate of 5.1 percent compared to an average rate of 4.0 percent (not shown) for its peer cities and 3.7 percent nationally.

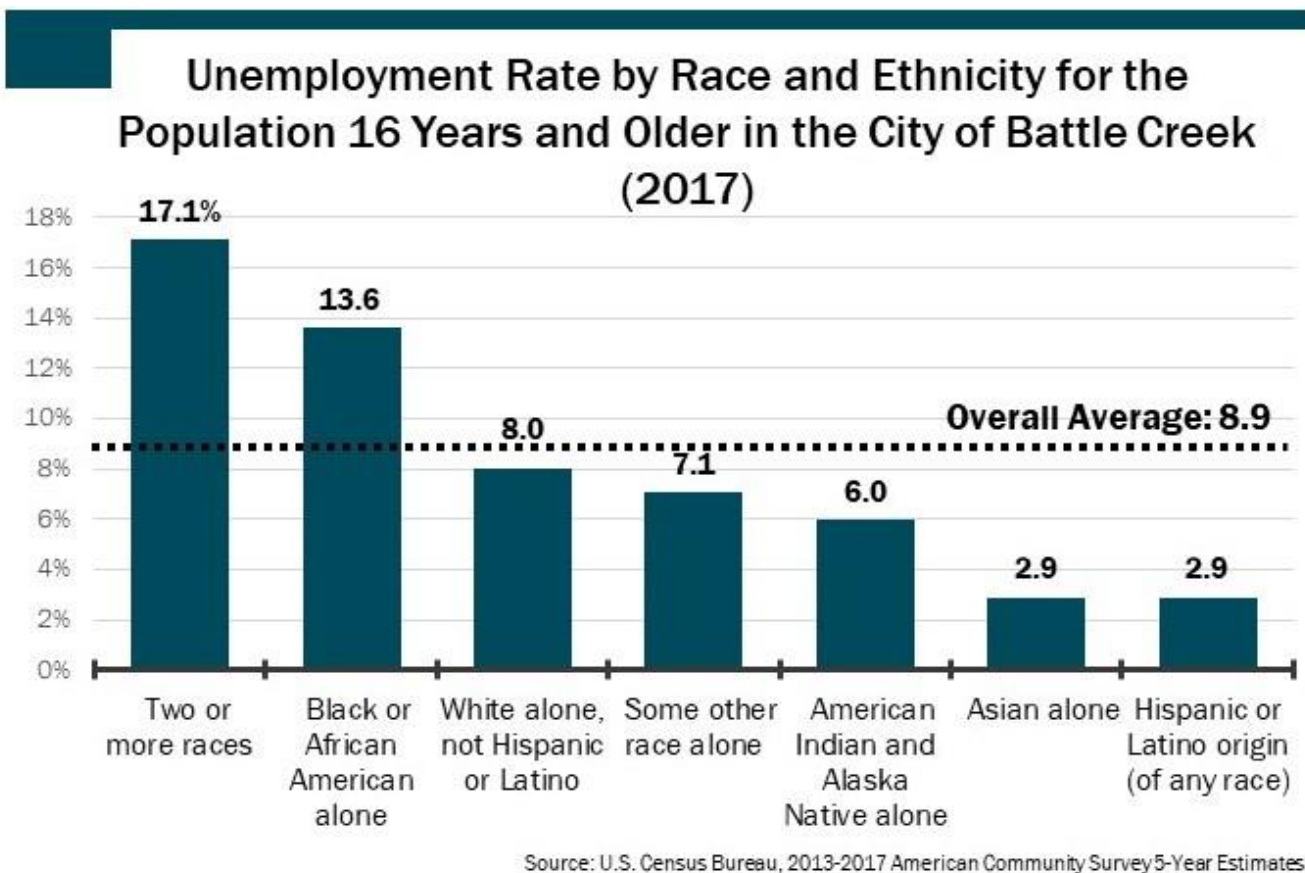
Figure 4.3: Unemployment Rate by Educational Attainment for the Population Ages 25–64 in the City of Battle Creek (2017)



The unemployment rate in the City of Battle Creek varies significantly by educational attainment. As shown in Figure 4.3, those with bachelor’s degrees or higher have much lower unemployment rates than those with some college or an associate degree, a high school diploma, or less than a high school education. This is likely because there are more jobs listed proportionally for individuals with a bachelor’s degree or higher than for those with just a high school diploma. According to Burning Glass, an analytics firm that provides data on job growth, skills in demand, and labor market trends, in 2017, there were 13.4 jobs posted requiring a bachelor’s degree or higher for every unemployed person 25 to 64 with a bachelor’s degree or higher. Conversely, there were only 2.8 jobs posted requiring a high school diploma for every unemployed person with only a high school diploma, and 1.1 jobs posted requiring an associate degree for every unemployed person with an associate degree or some college.

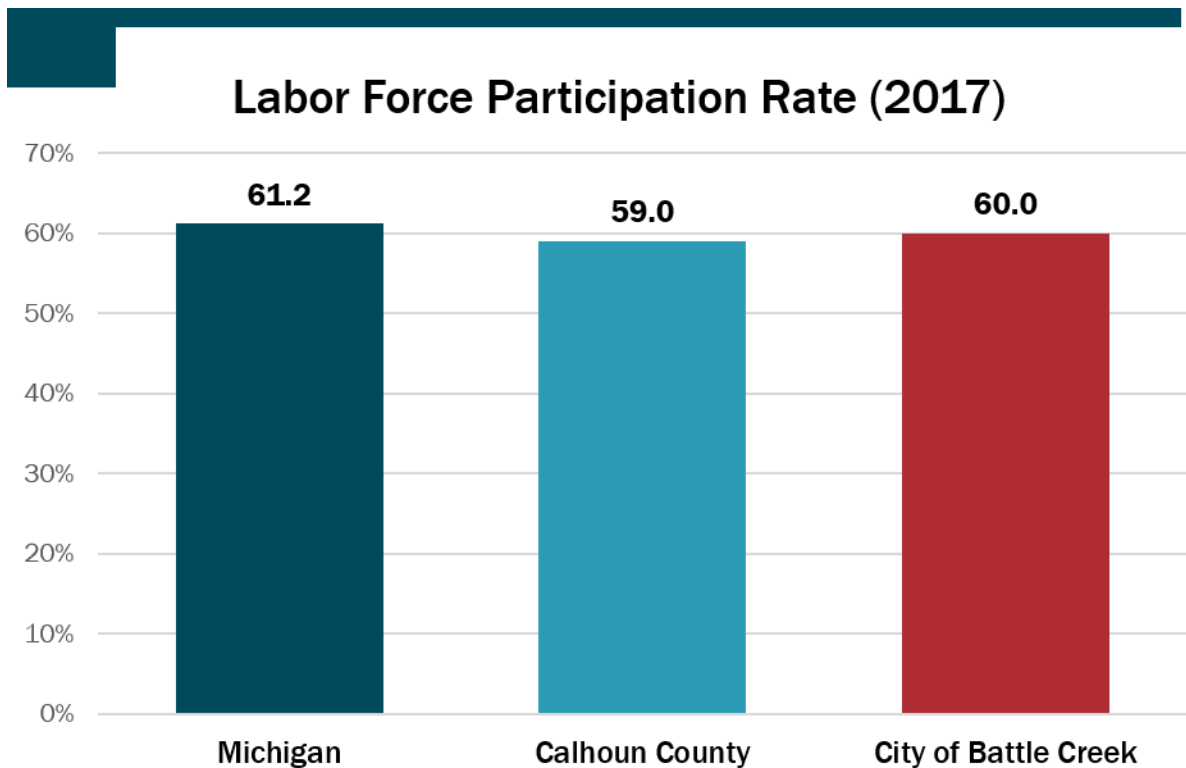
It is important to note the difference between postings and workers needed. Some job postings represent a single open position, while others, such as for production workers, may be intended to hire multiple people, which would not be accounted for in these data.

Figure 4.4: Unemployment Rate by Race and Ethnicity for the Population Aged 16 Years and Older in the City of Battle Creek (2017)



Black residents of the city of Battle Creek have an unemployment rate that is 1.5 times higher than the city average (Figure 4.4). Individuals who are two or more races have an unemployment rate that is twice as high as the city average. Asian and Hispanic residents of the City of Battle Creek are reported as having the lowest unemployment rates.

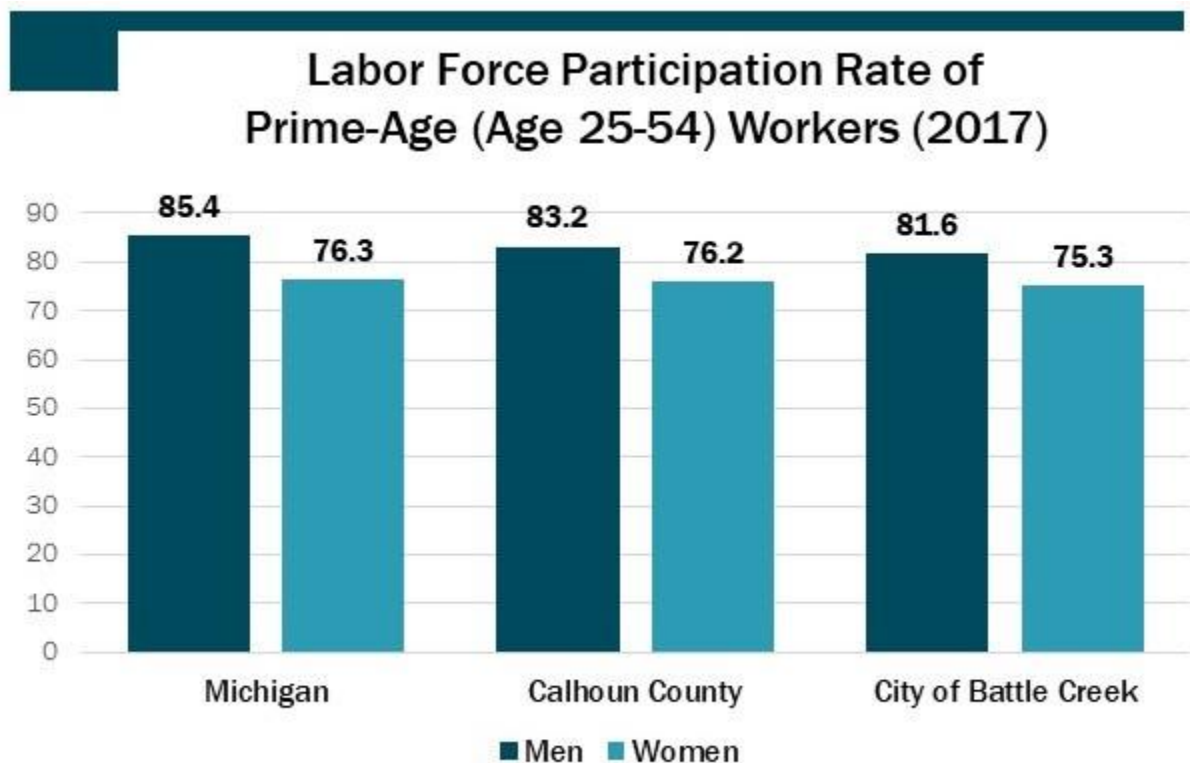
Figure 4.5: Labor Force Participation Rate (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

The labor force participation rate in the city of Battle Creek is slightly lower than the rate for the state of Michigan. As shown in Figure 4.5, the rate as reported by the ACS for Battle Creek is 60.0 percent, compared to 59.0 percent for the county and 61.2 percent for the state. The labor force participation rate measures an economy's active labor force. It is the sum of all noninstitutionalized individuals 16 and older who are either working or looking for work, divided by the entire population 16 and older. It represents the relative number of people available to produce goods or services. Labor force participation rates typically fall as individuals reach 55 or older in age.

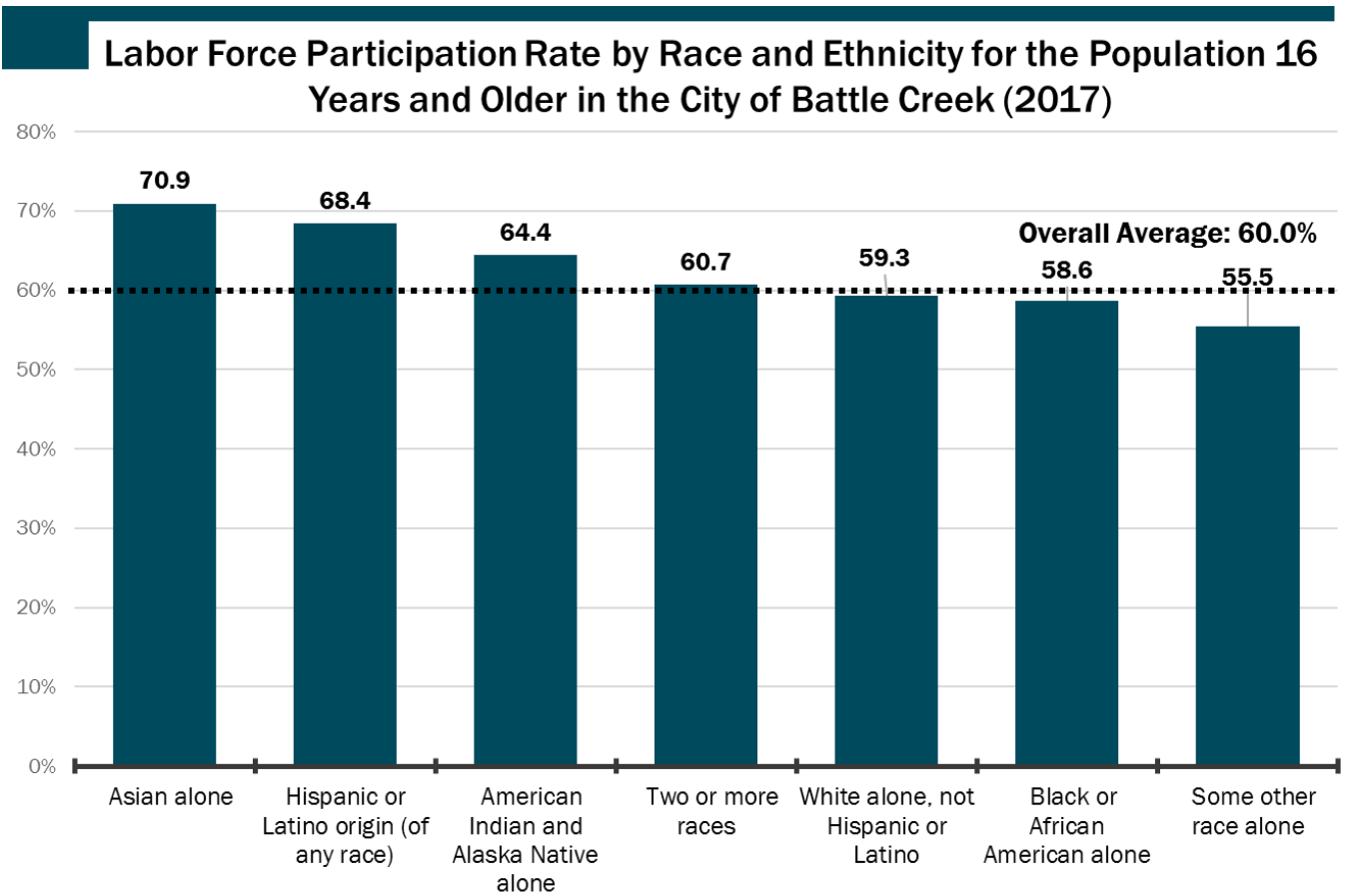
Figure 4.6: Labor Force Participation Rate of Prime-Age (Age 25-54) Workers (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

The labor force participation rate for prime-age workers in the city of Battle Creek is also lower than the rate for Calhoun County and the state of Michigan. As shown in Figure 4.6, the rate for Battle Creek is 81.6 percent for prime age men and 75.3 percent for prime age women. Prime age women generally have a lower labor force participation rate than men as they are disproportionately responsible for care work, such as child care and elder care, which stand in contrast to their participation in the labor market. In the city of Battle Creek, women with children under the age of six, have the lowest labor force participation rate of any group.

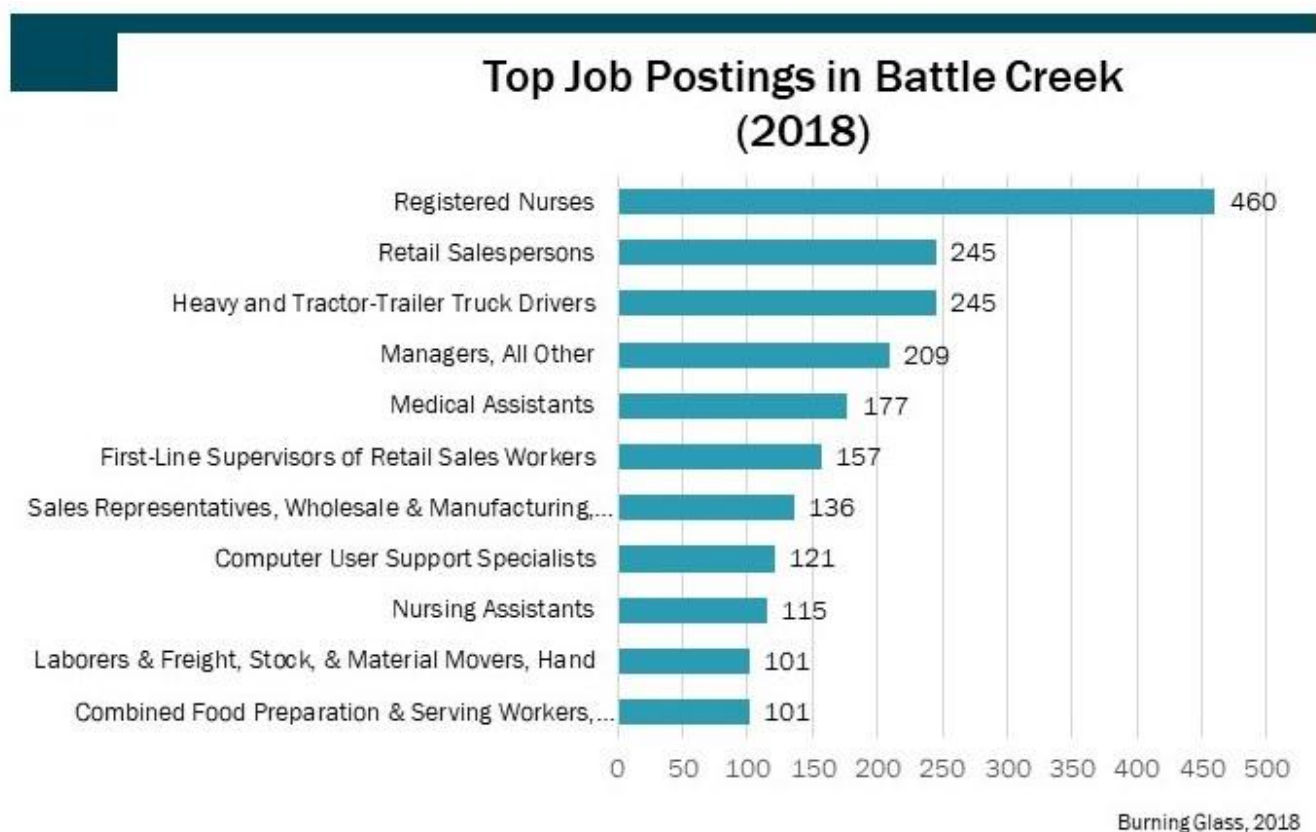
Figure 4.6: Labor Force Participation Rate by Race and Ethnicity for the Population Aged 16 Years and Older in the City of Battle Creek (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Individuals who are Asian, Hispanic or Latino, and American Indian or Alaskan Native have the highest labor force participation rates in the city of Battle Creek. As shown in Figure 4.7, individuals who are non-Hispanic Whites, Black or African American, or some other race have the lowest labor force participation rates. Overall, the discrepancy between racial groups in the city of Battle Creek is moderately wide, with a 15.4 percentage point difference between Asians (the group with the highest labor force participation rate) and some other race (the group with the lowest labor force participation rate).

Figure 4.8: Top Job Postings in the City of Battle Creek (2018)



In 2018, the last full year for which data are available, the top job postings in the city of Battle Creek were for registered nurses, retail salespersons, and heavy and tractor-trailer truck drivers. As shown in Figure 4.8, three of the top jobs were in the health care industry, and two of the top jobs were in the retail sector. Health care and social assistance, manufacturing, and retail trade were the top industries in which jobs were available. Those three industries are responsible for the majority (50.4 percent) of job postings. Bronson Healthcare, the Kellogg Company, and Firekeepers Casino were the top employers posting jobs.

Figure 4.9: Employment in the City of Battle Creek

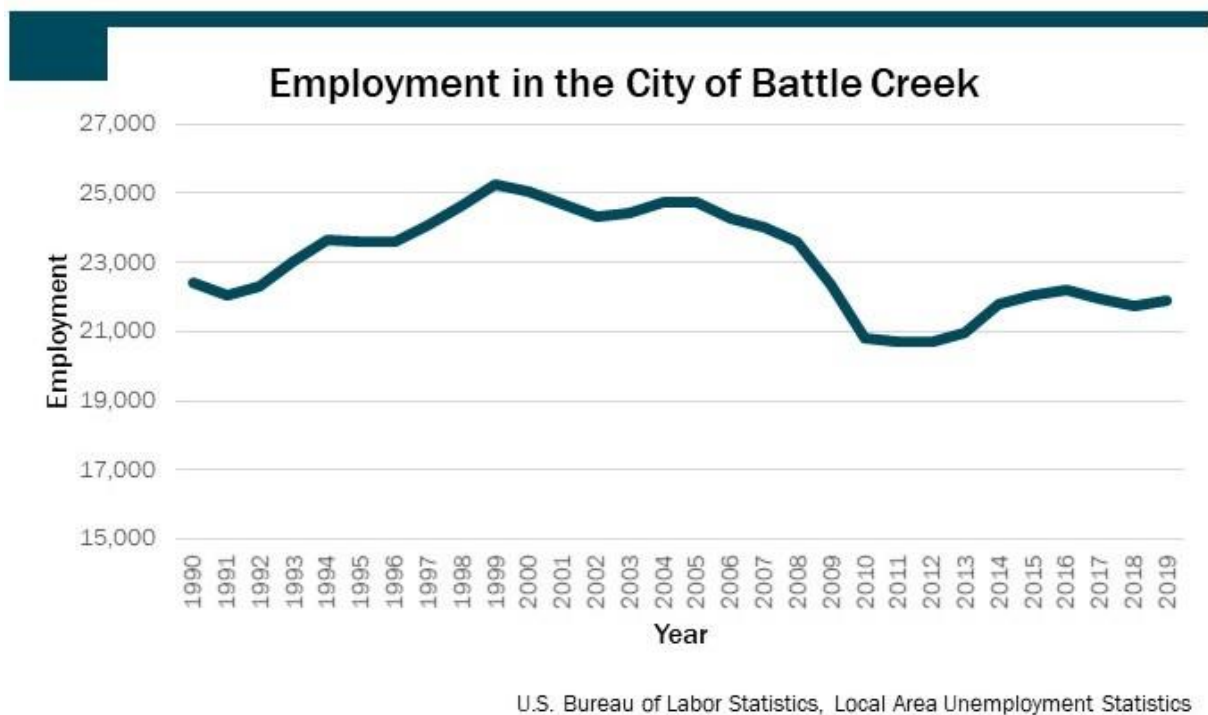


Figure 4.10: Percentage Change in Employment in Calhoun County (2010–2018)

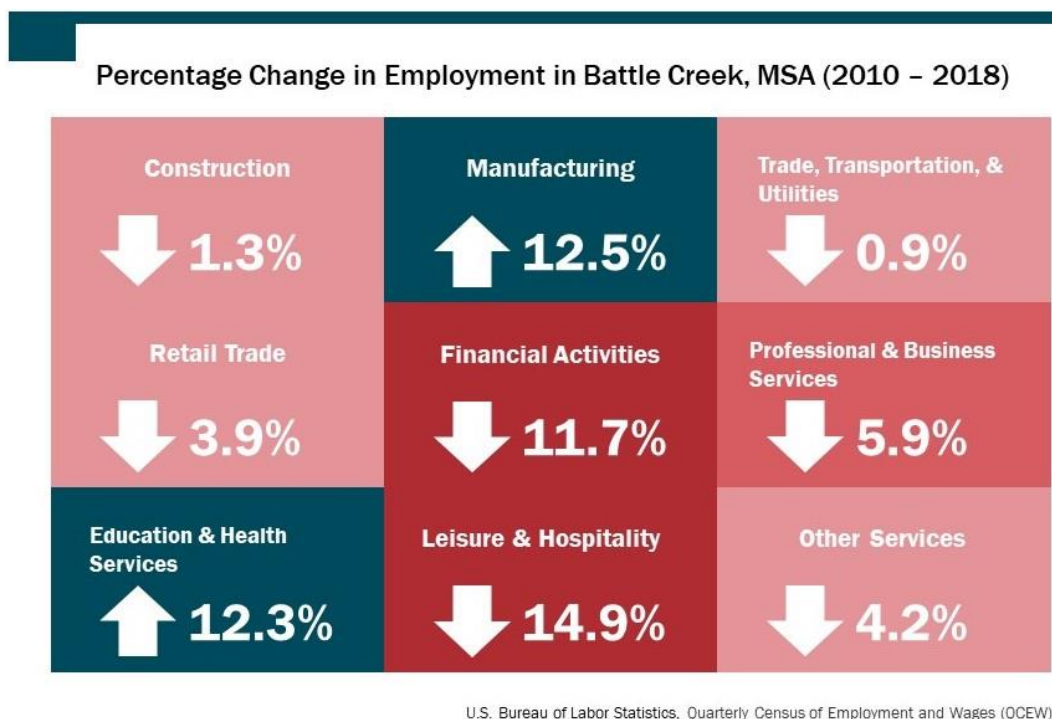


Table 4.1: Share of Employment in Calhoun County

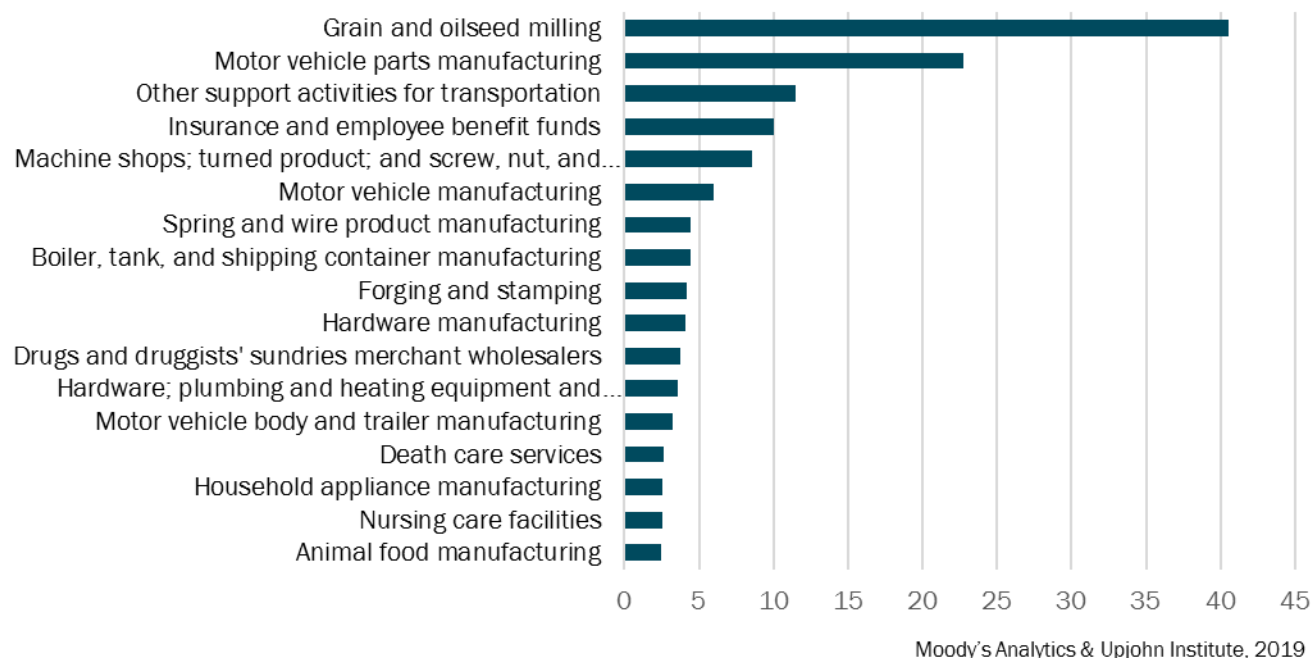
Sector	2005		2010		2018	
	Total	%	Total	%	Total	%
Total employment	49,098		43,158		44,322	
Goods producing	16,251	33.1	12,227	28.3	13,570	30.6
Service producing	32,847	66.9	30,931	71.7	30,753	69.4
Construction	2,131	4.3	1,564	3.6	1,543	3.5
Manufacturing	13,847	28.2	10,423	24.2	11,724	26.5
Trade, transportation, & utilities	9,431	19.2	8,525	19.8	8,452	19.1
Retail trade	6,831	13.9	5,725	13.3	5,501	12.4
Financial activities	1,502	3.1	1,227	2.8	1,084	2.4
Professional & business services	5,315	10.8	5,515	12.8	5,187	11.7
Education & health services	8,740	17.8	9,293	21.5	10,437	23.5
Leisure & hospitality	5,574	11.4	4,564	10.6	3,882	8.8
Other services	1,630	3.3	1,384	3.2	1,326	3.0

U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

Overall, total employment in Calhoun County is down 8.7 percent since before the Great Recession. As shown in Figure 4.9, while employment in the city has rebounded slightly, it has recently begun to plateau, indicating a slow-growing labor market. As shown in Figure 4.10 and Table 4.1, sectors of the economy such as financial activities, professional and business services, and leisure and hospitality have shown considerable contraction since the end of the Great Recession. Education and health services and manufacturing have shown significant growth.

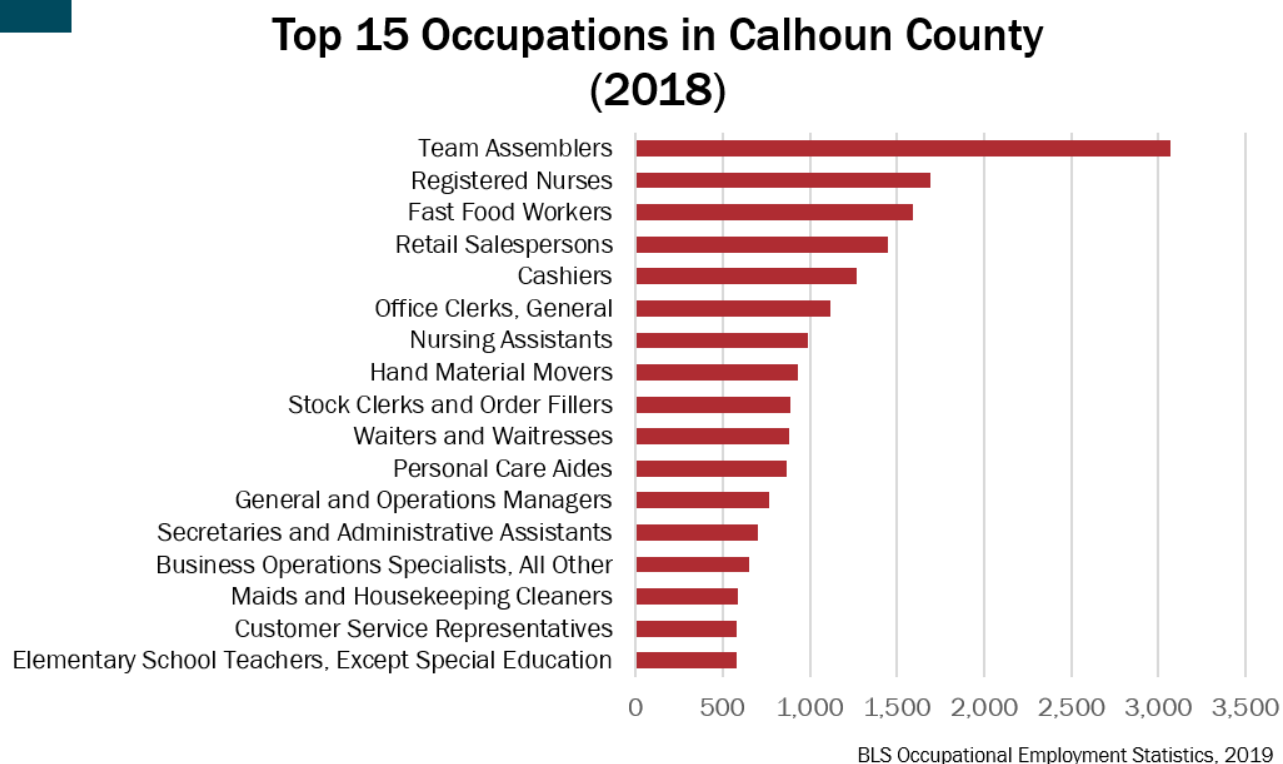
Figure 4.11: Top 15 Industries in Calhoun County by Location Quotient (2019)

Top 15 Industries in Calhoun County by Location Quotient (2019)



The primary industries in which Calhoun County specializes include food manufacturing, transportation equipment manufacturing, and fabricated metal product manufacturing. As shown in Figure 4.11, grain and oilseed milling make up the most specialized area of Battle Creek's economy. The location quotient demonstrates how concentrated an industry is in the county compared to the nation. Over the next 5 years, most of these industries are projected to either reduce their employment in the region or cease growing, with the exception of motor vehicle manufacturing and heating equipment merchant wholesalers.

Figure 4.12: Top 15 Occupations in Calhoun County (2018)



The primary occupations in which individuals in Calhoun county are employed include **team assemblers, registered nurses, and fast food workers**. Since 2010, the number of individuals employed as team assemblers has increased by 82.7 percent, the number of individuals employed as registered nurses has increased by 64.1 percent, and the number of individuals employed as fast food workers has increased by 112 percent. As shown in Figure 4.12, many of the current top jobs in Calhoun County are low-paying. However, several of the top jobs, especially those in education and health care, require education beyond a high school diploma.

Figure 4.13: Most Common Occupations in Peer Cities (2018)

Most Common Occupations — Peer Cities (2018)			
	Most Common Job	Second Most Common Job	Third Most Common Job
Altoona, PA	Retail Salespersons	Fast Food Workers	Registered Nurses
Battle Creek, MI	Team Assemblers	Registered Nurses	Fast Food Workers
Cleveland, TN	Fast Food Workers	Cashiers	Retail Salespersons
Dubuque, IA	Retail Salespersons	Customer Service Rep	Fast Food Workers
Jefferson City, MO	Administrative Assistants	Retail Salespersons	Cashiers
Joplin, MO	Truck Drivers	Retail Salespersons	Cashiers
Lancaster, PA	Retail Salespersons	Office Clerk	Hand Movers
Midland, MI	Truck Drivers	Service Operator	Office Clerk
National	Fast Food Workers	Hand Movers	Cashiers
Owensboro, KY	Fast Food Workers	Retail Salespersons	Registered Nurses
Saginaw, MI	Retail Salespersons	Registered Nurses	Team Assemblers
Sheboygan, WI	Hand Movers	Fast Food Workers	Retail Salespersons

BLS Occupational Employment Statistics, 2019

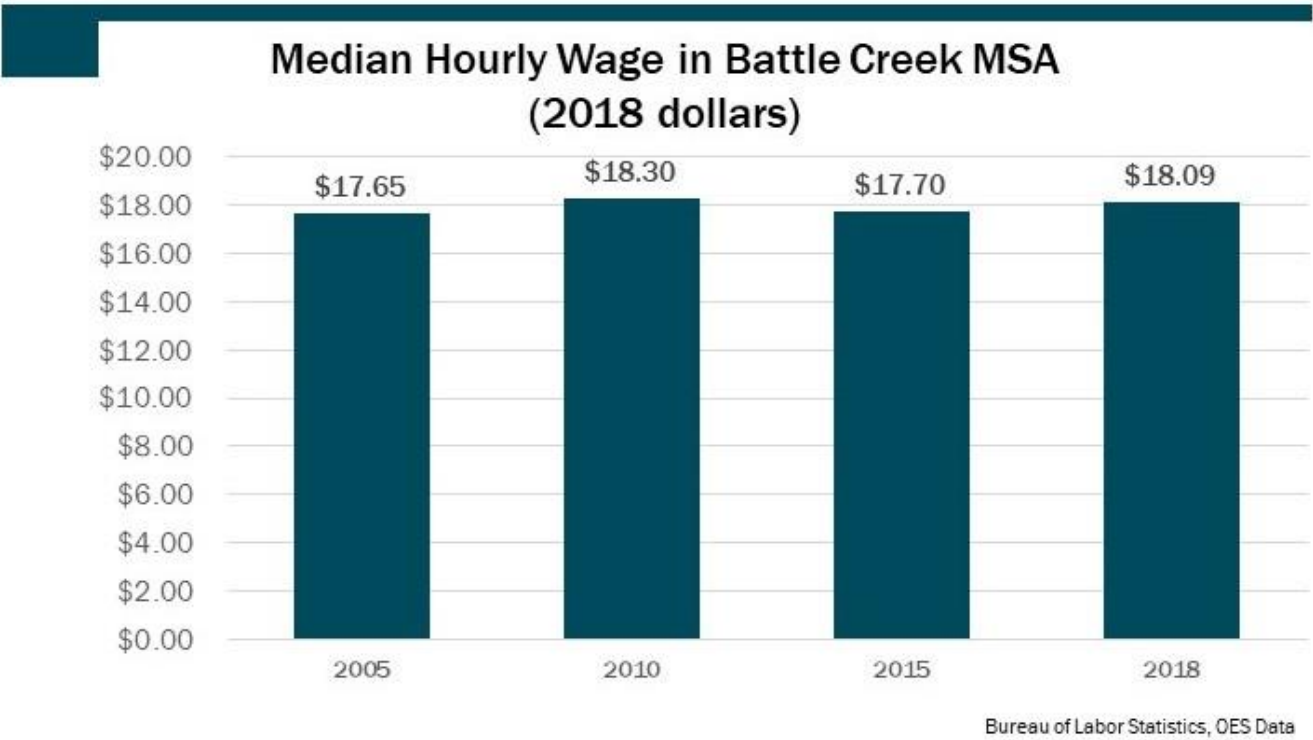
Calhoun county has more middle-skill jobs as its top occupations than its peer cities. While retail salespersons are the top job in four of the ten peer cities, the top occupation in Calhoun county is team assembler. Additionally, registered nurses are the second most common job in Calhoun county, an occupation that is in the top three in only three other peer cities. Fast food workers round out the list and appear as one of the three most common jobs in five peer cities and the most common job nationally.

WHAT THIS MEANS: The city of Battle Creek has an industrial base that is reliant on the manufacturing and health care sectors. Wages in these sectors of the economy tend to be high enough to provide for middle-income jobs for Battle Creek residents. However, many of these growing jobs require additional training beyond a high school diploma. The lower levels of educational attainment within the city of Battle Creek may make obtaining jobs in these industries difficult for residents of the city.

5. INCOME

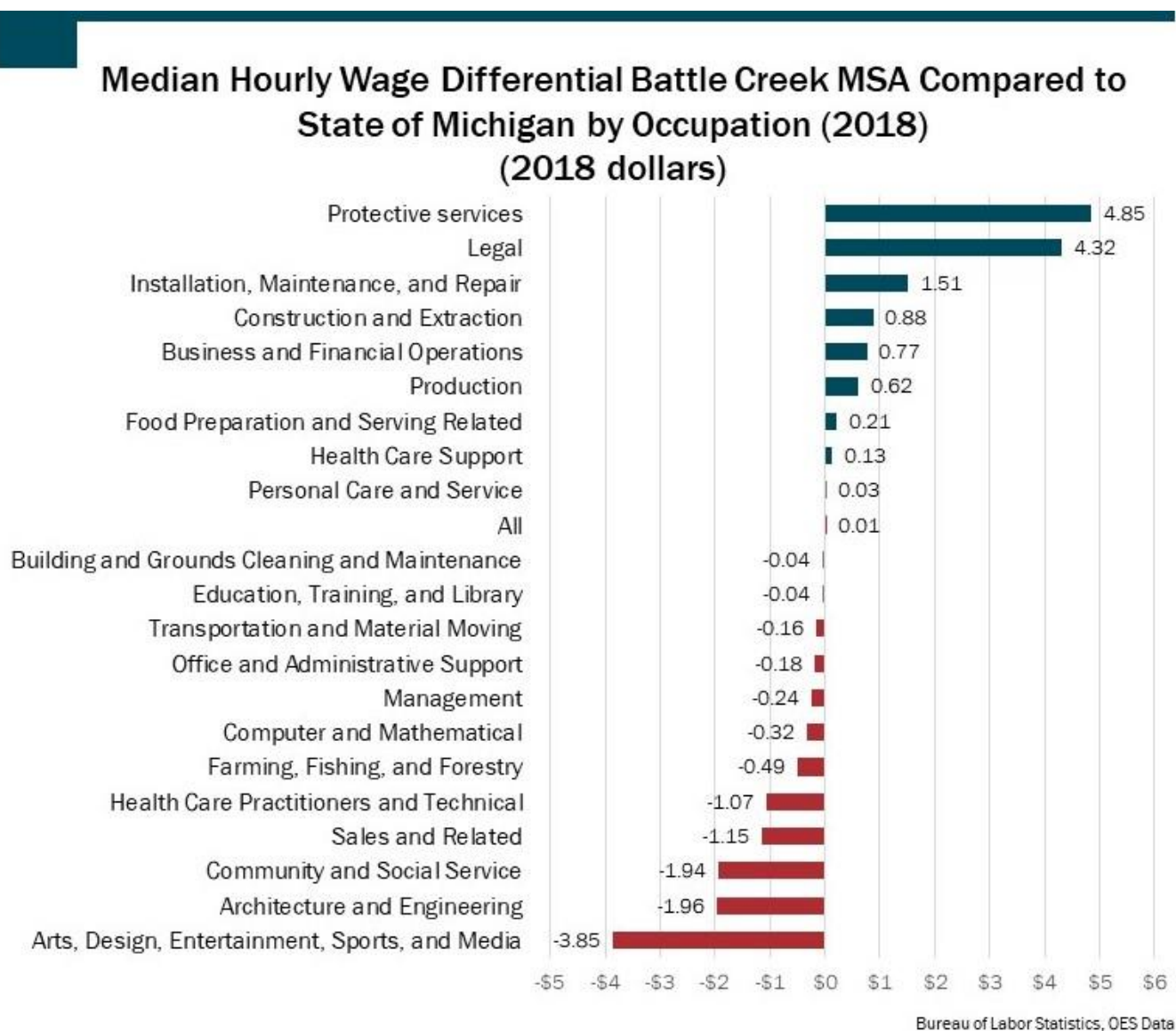
THE TREND: Overall, the median hourly wage for jobs in the Battle Creek MSA is relatively high. For individuals living the city of Battle Creek, however, median household income is relatively low compared to the state and county, and the number of households living in poverty is growing.

FIGURE 5.1: Median Hourly Wage in Calhoun County (2018 dollars)



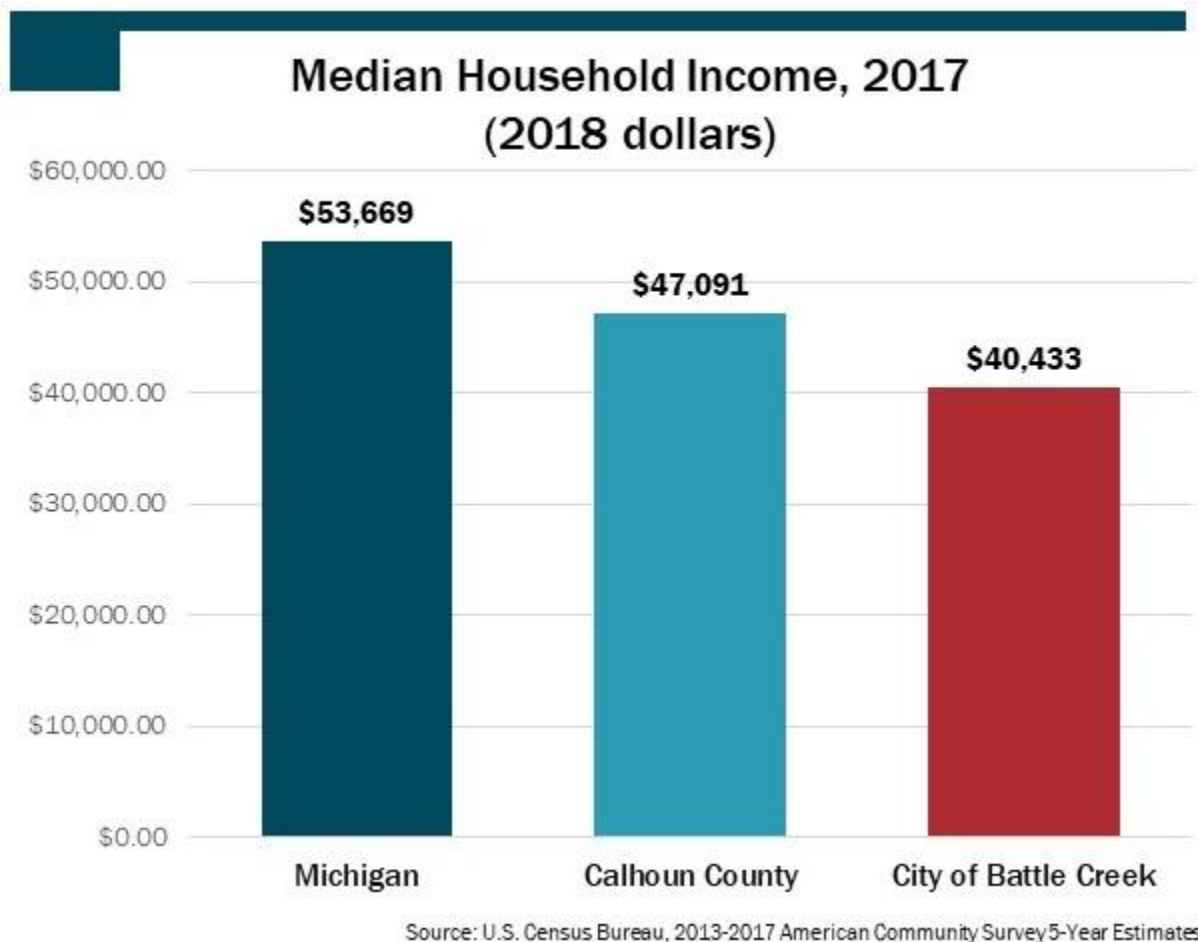
The median hourly wage in real dollars in the Battle Creek MSA has remained steady over the past couple of decades. The lack of real wage growth can help to limit economic growth, as workers may look to other places to realize additional earnings. The Battle Creek MSA has a median wage above its regional competitors, \$18.09. The median hourly wage was \$17.26 in the Kalamazoo MSA in 2018 and \$17.33 in the Grand Rapids MSA. As shown in Figure 5.1, the median hourly wage in Michigan is \$18.08, placing the Battle Creek MSA slightly higher than the state in terms of hourly earnings. Median hourly wages are not available by race at the local level.

FIGURE 5.2: Median Hourly Wage Differential, Battle Creek MSA compared to state of Michigan by Occupation (2018 dollars)



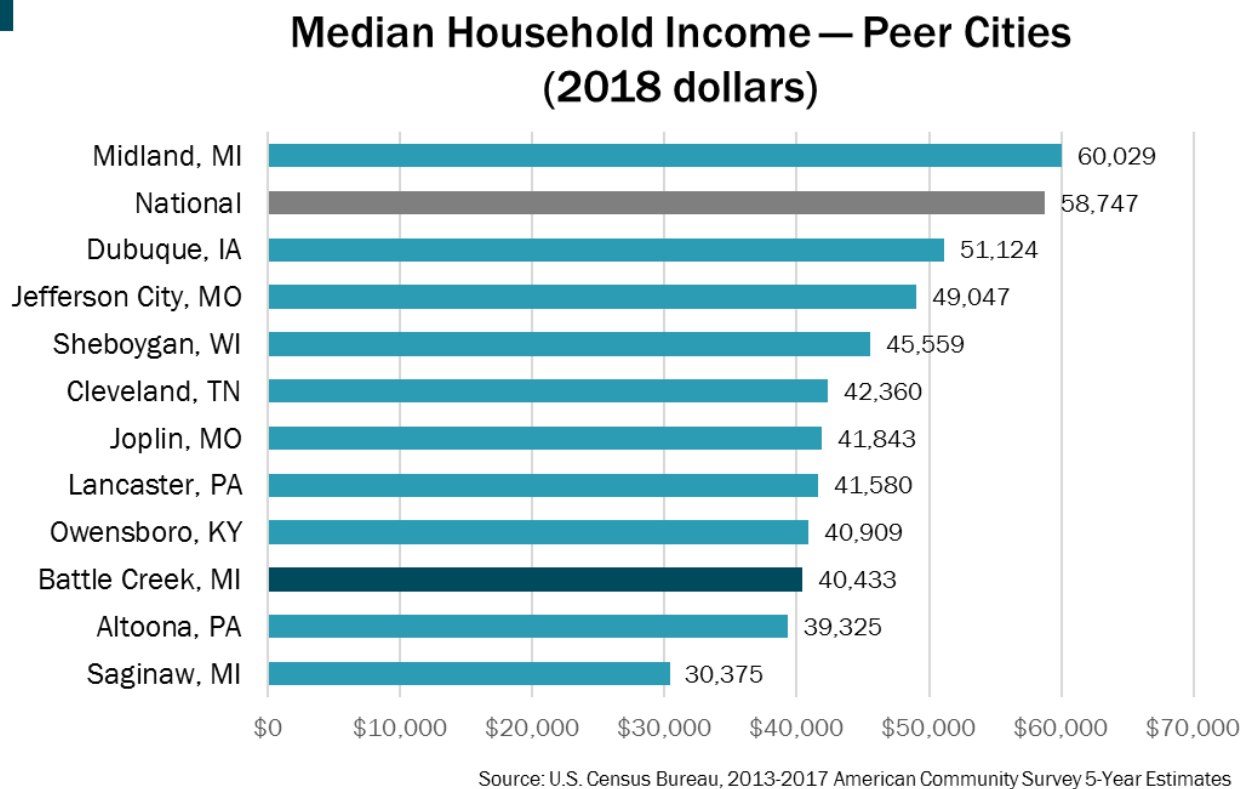
Occupations in protective services, legal professions, and installation and maintenance earn more than the median-wage occupation in the state of Michigan. As shown in Figure 5.2, occupations in community and social services, architecture and engineering, and arts, design, entertainment, sports, and media earn less than the median wage in Michigan. Production jobs and health-care support jobs in the growing manufacturing and health-care sectors earn more than the state of Michigan median wage; however, health-care practitioners and technical workers, occupations that on average require more education, earn less than the median wage for the state of Michigan.

FIGURE 5.3: Median Household Income, 2017 (2018 dollars)



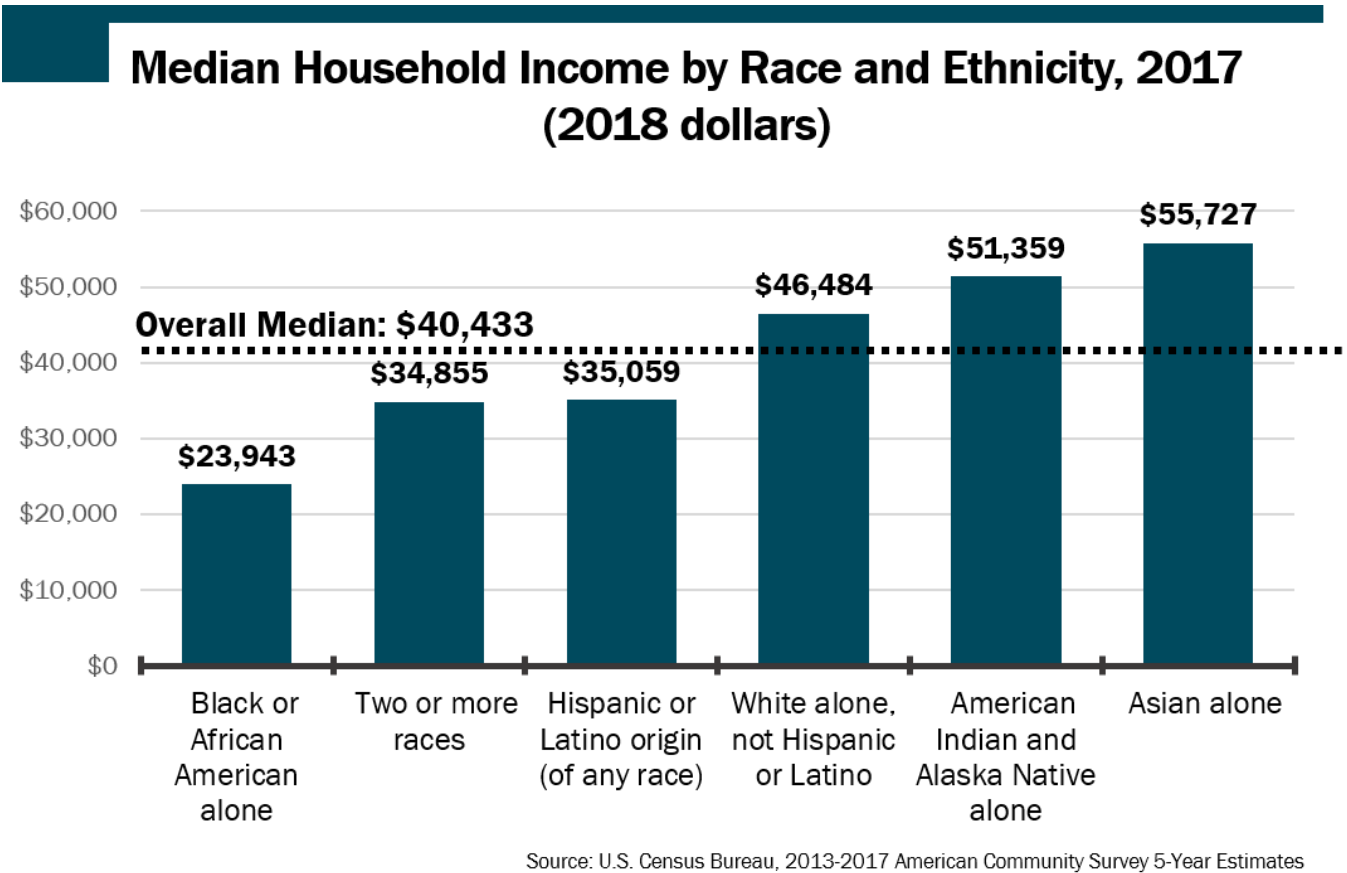
The median household income in the city of Battle Creek is much lower than that of Calhoun County or the state of Michigan. As shown in Figure 5.3, the median household income in Battle Creek is \$40,433, compared to \$47,091 for Calhoun County and \$53,669 for the state of Michigan. Since 2013, the median household income in the city of Battle Creek has decreased by just under 1 percent when adjusted for inflation. This may not be the result of lower incomes, though, as the proportion of single-person households have grown within the city.

FIGURE 5.5: Median Household Income—Peer Cities (2018 dollars)



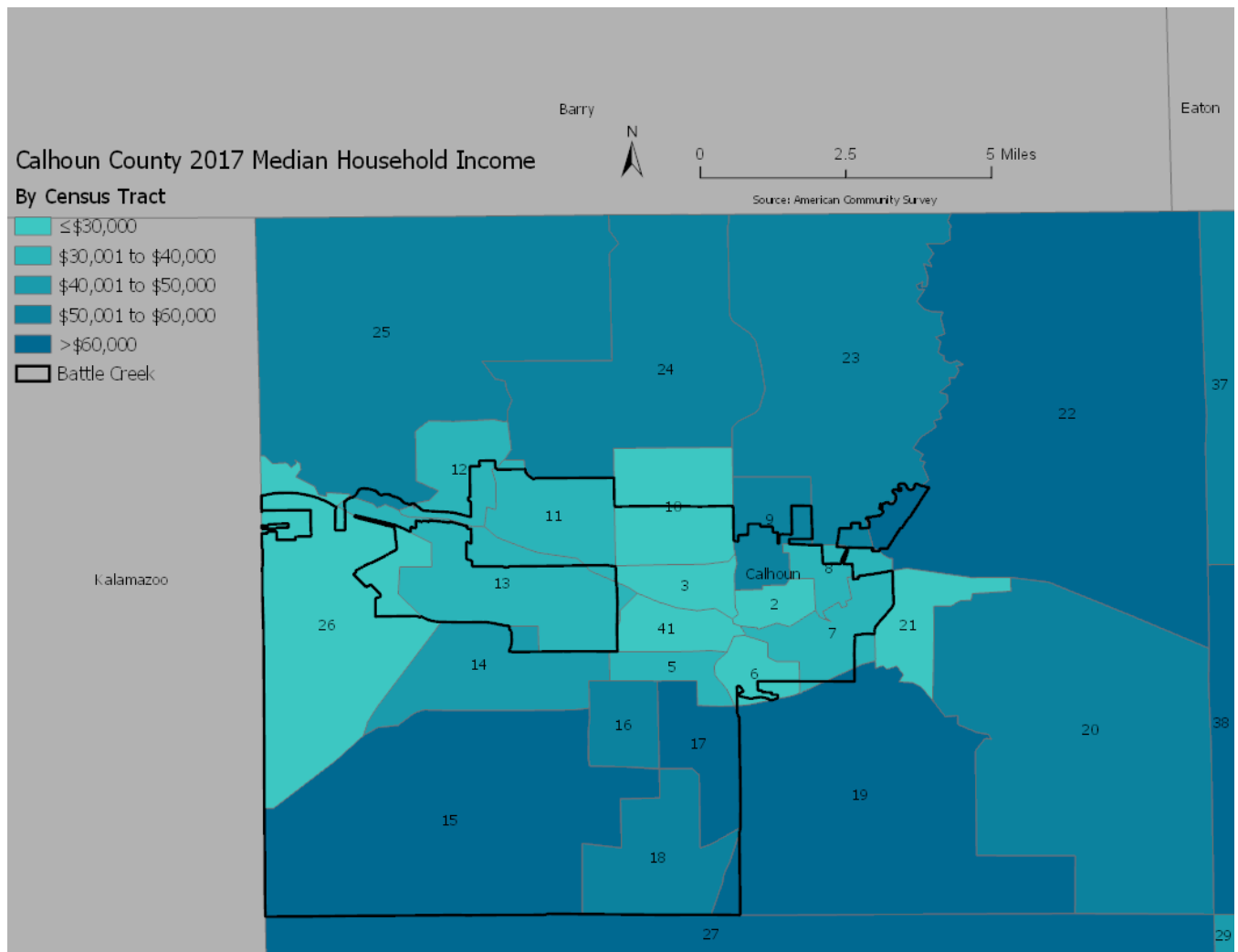
Compared to its peer cities, Battle Creek ranks near the bottom in terms of median household income. As Figure 5.5 shows, the median household income in Battle Creek is \$40,433, compared to the national median income of \$58,747. A pattern emerges showing that cities with higher levels of unemployment and lower levels of education have lower household incomes. Adjusted for inflation, Battle Creek was one of four peer cities to see household incomes decrease since 2013.

FIGURE 5.6: Median Household Income—by Race & Ethnicity (2018 dollars)



Households headed by individuals who are Black or African American have the lowest median household income in the city of Battle Creek. As shown in Figure 5.3, the median household income for households headed by individuals who are Black or African American was \$23,943, which was less than half that of households headed by those that are Asian. When adjusted for inflation, the median household income of households headed by individuals who are Black or African American has decreased from \$26,777 in 2018 dollars in 2010, a decline of \$2,834. The median household income for Asian headed households also decreased in this time period from \$81,014 in 2018 dollars in 2010, as did White alone, not Hispanic or Latino households which saw their median household income decrease from \$47,998 in 2010. All other racial and ethnic groups saw their median household incomes increase since 2010.

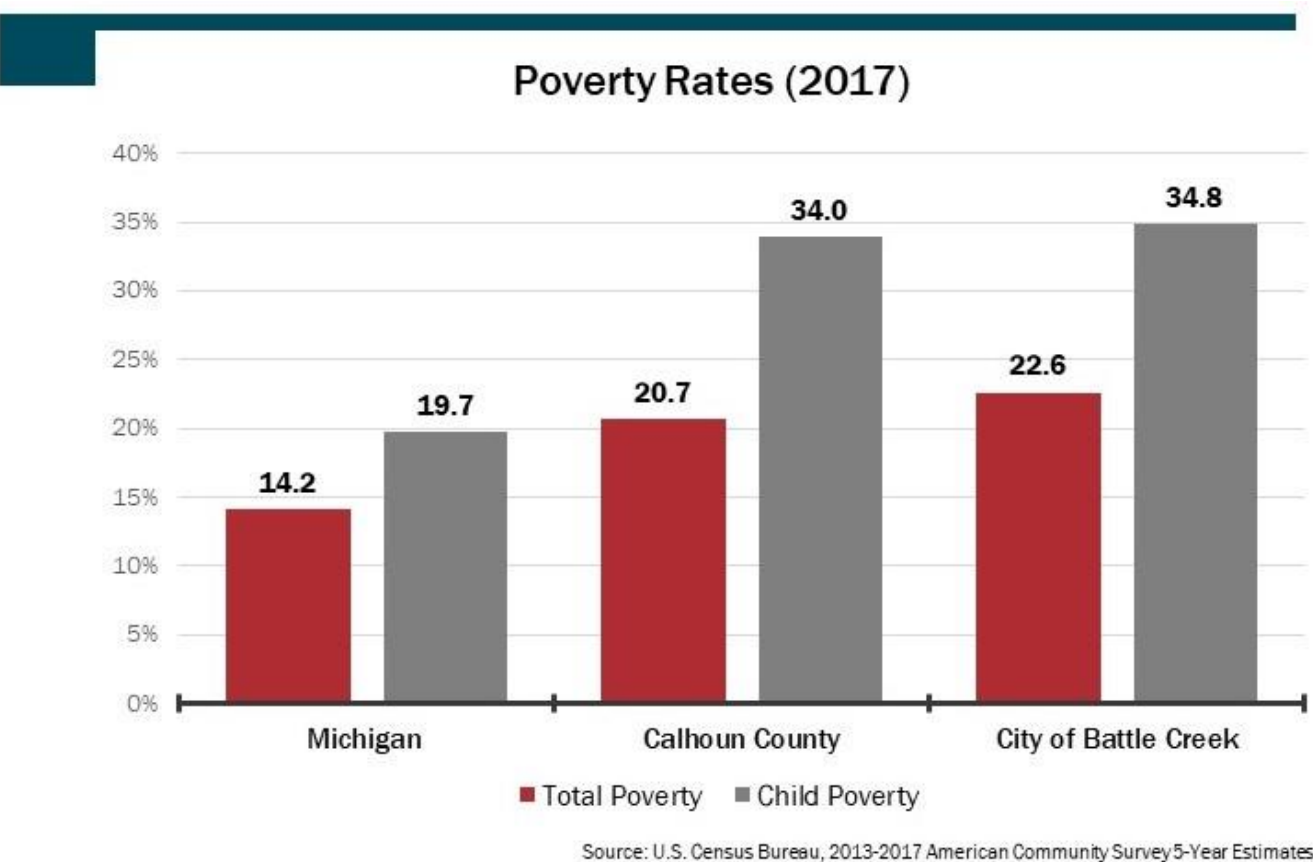
MAP 5.1: Median Household Income by Census Tract—Calhoun County



Source: American Community Survey

Neighborhoods located near the downtown have the lowest median household incomes, while those located in the southern part of the city have the highest median household incomes. As Map 5.1 shows, the census tracts with the lowest median household incomes are primarily located within the city of Battle Creek. Since 2010, just over half (52.9 percent) of the census tracts within the city have seen their median household incomes decrease, while just under half (47.1 percent) of census tracts within Battle Creek have seen their median household incomes increase. The greatest decreases in median household income have come in the western area of the city, just north of Interstate Highway 94, and in the neighborhoods north of the Kalamazoo River. The greatest increases have come in the Westlake and Prairieview neighborhoods.

FIGURE 5.6: Poverty Rates (2017)



Both the overall poverty rate and child poverty rate in the city of Battle Creek are significantly higher than those for the state of Michigan. As shown in Figure 5.6, the poverty rate in Battle Creek is 22.6 percent, compared to 20.7 percent for Calhoun County and 14.2 percent for the state of Michigan. Since 2010, the poverty rate in Battle Creek has increased from 20.8 percent to 22.6 percent. The child poverty rate is also much higher in Battle Creek, standing at 34.8 percent, compared to Calhoun County at 34.0 percent and Michigan at 19.7 percent. The child poverty rate in Battle Creek has increased from 30.7 percent in 2010 to 34.8 percent in 2017.

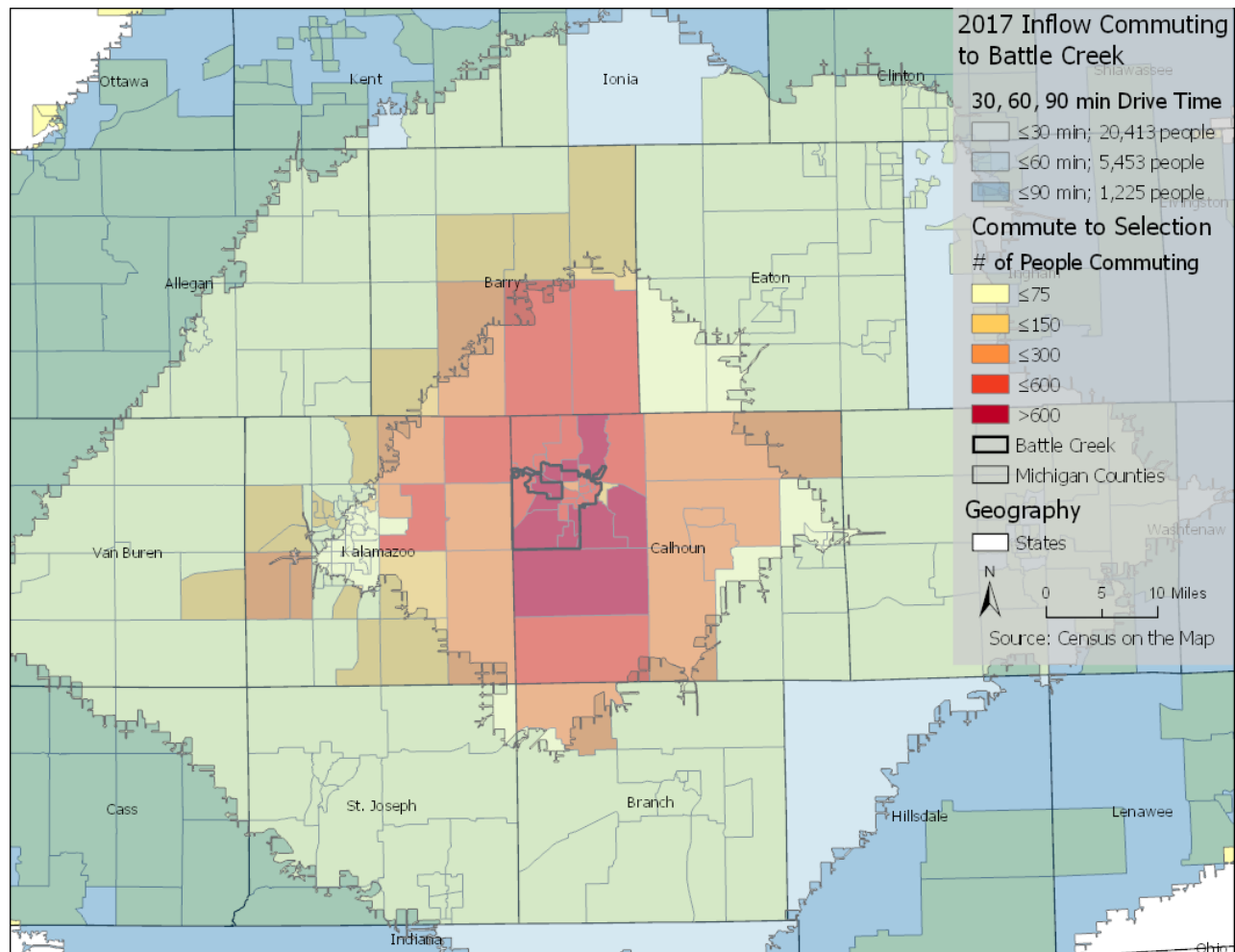
WHAT THIS MEANS: Low income levels have detrimental consequences for individual households and neighborhoods within the city. High levels of poverty drive up the cost of providing many city services, such as public health, police, schools, courts, and fire protection. This in turn reduces the ability of cities to provide additional services, leading to an overall burden for the entire city, not just specific neighborhoods distressed with high levels of poverty. Childhood poverty endangers the learning, development, and health of children, which can have negative

consequences for their future economic well-being. Overall, the increase in poverty levels and decrease of household income indicates that low-income people are finding it difficult to participate in the more lucrative sectors of the Battle Creek economy, such as health care and professional and business services.

6. COMMUTING PATTERNS

THE TREND: Battle Creek has a larger commuting inflow than outflow, meaning more people commute into the city than commute out of the city. Moreover, those commuting to the city tend to be older and have higher earnings.

MAP 6.1: Inflow Commuting to City of Battle Creek

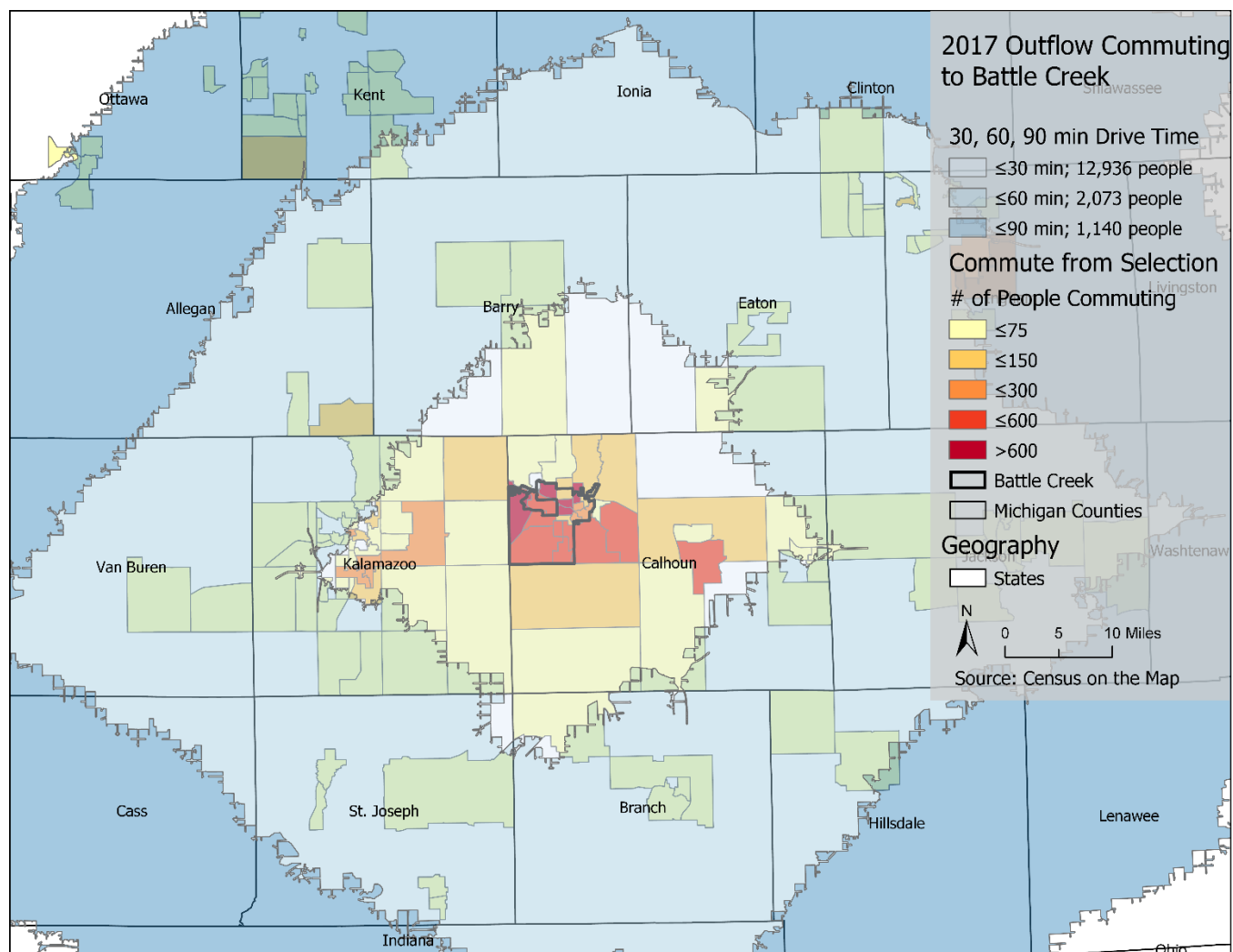


Source: Census on the Map

Most commuters to the city of Battle Creek live within a 30-minute drive of the city center. As shown in Map 6.1, three quarters (74.4 percent or 20,413) of the total inflow commuting population live within a 30-minute drive of the center of Battle Creek, meaning a quarter (25.6 percent or 7,011) of commuters live outside of a 30-minute drive. Moreover, 1.2 percent (333) live

outside of a 90-minute drive to the city. The highest concentrations of commuters to Battle Creek live within census tracts that are within, or intersect, the city limits; the largest share of workers in Battle Creek also live in Battle Creek. Sizeable commuter concentrations are located from one to three census tracts from the city limits, and the overall commuter shed is dense in most southwest Michigan counties.

MAP 6.2: Outflow Commuting from City of Battle Creek



Source: Census on the Map

Most commuters from the city of Battle Creek work within a 30-minute drive of the city center. As shown on Map 6.2, over three-quarters of outflow commuters (77.1 percent or 12,936) work within 30 minutes of Battle Creek, meaning less than a quarter (22.9 percent or 3,845) work more than 30 minutes from Battle Creek. Moreover, less than 3.8 percent (632) of commuters work outside of

a 90-minute drive to the city. The highest concentrations of outflow commuting are primarily located within the city of Battle Creek and secondarily located within Calhoun County. However, there are census tracts in Kalamazoo, Kent, Allegan, and Ingham counties where between 75 and 150 outflow commuters are employed.

TABLE 6.1: Inflow and Outflow Commuting Times

Commute time	People inflow commuting to Battle Creek		People outflow commuting from Battle Creek	
	Total	%	Total	%
≤ 30 minutes	20,413	74.4	12,936	77.1
≤ 60 minutes	5,453	19.9	2,073	12.3
≤ 90 minutes	1,225	4.5	1,140	6.8
> 90 minutes	333	1.2	632	3.8
Total commuters	27,424	100	16,781	100

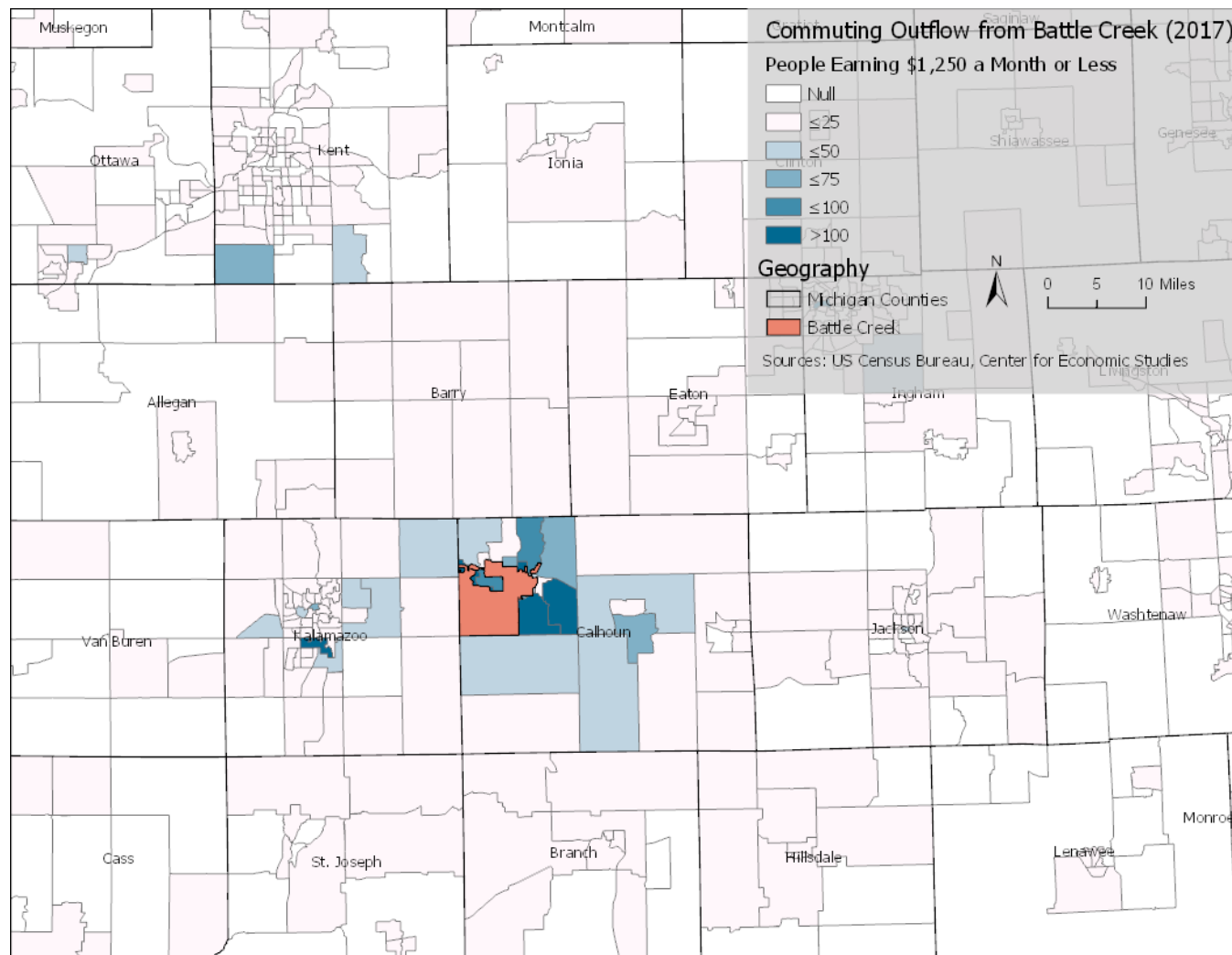
Inflow and outflow to and from Battle Creek are both concentrated around, or within, the city limits, but they differ in density. As shown in Table 6.1, like inflow commuters to Battle Creek, outflow commuters from Battle Creek are mostly concentrated within the city limits of Battle Creek, or a 30-minute drive from the city center. The areas to which outflow commuters travel are sparser than the locations from which inflow commuters travel. Moreover, there are census tracts in both Calhoun and Kalamazoo counties that draw no outflow commuters from Battle Creek, while inflow commuters to Battle Creek come from nearly all surrounding census tracts.

The commuting shed to Battle Creek is largest for higher earners. Higher earners are willing to commute further for work in Battle Creek than lower earners. Two prime factors could contribute to this difference: 1) availability of reliable transportation as earnings increase and 2) willingness to travel farther for greater pay. As Maps 6.3 through 6.8 indicate, lower-earning workers (\$1,250 a month or less) tend to commute from locations 5 to 10 miles from the city limits, while the two higher income bands (\$1,250 to \$3,333 and \$3,333 or more) commute 5 to 20 miles from the city limits. Additionally, as Table 6.2 shows, the number of census tracts containing fewer than 100 commuters increases with higher income in both inflow and outflow commuting. All three income bands still have the highest concentrations of commuters within the 30-minute drive-time area.

Higher earners are willing to commute out further from Battle Creek for work than lower earners, but the concentrations are sparser, and the expansion of the commuting shed becomes more

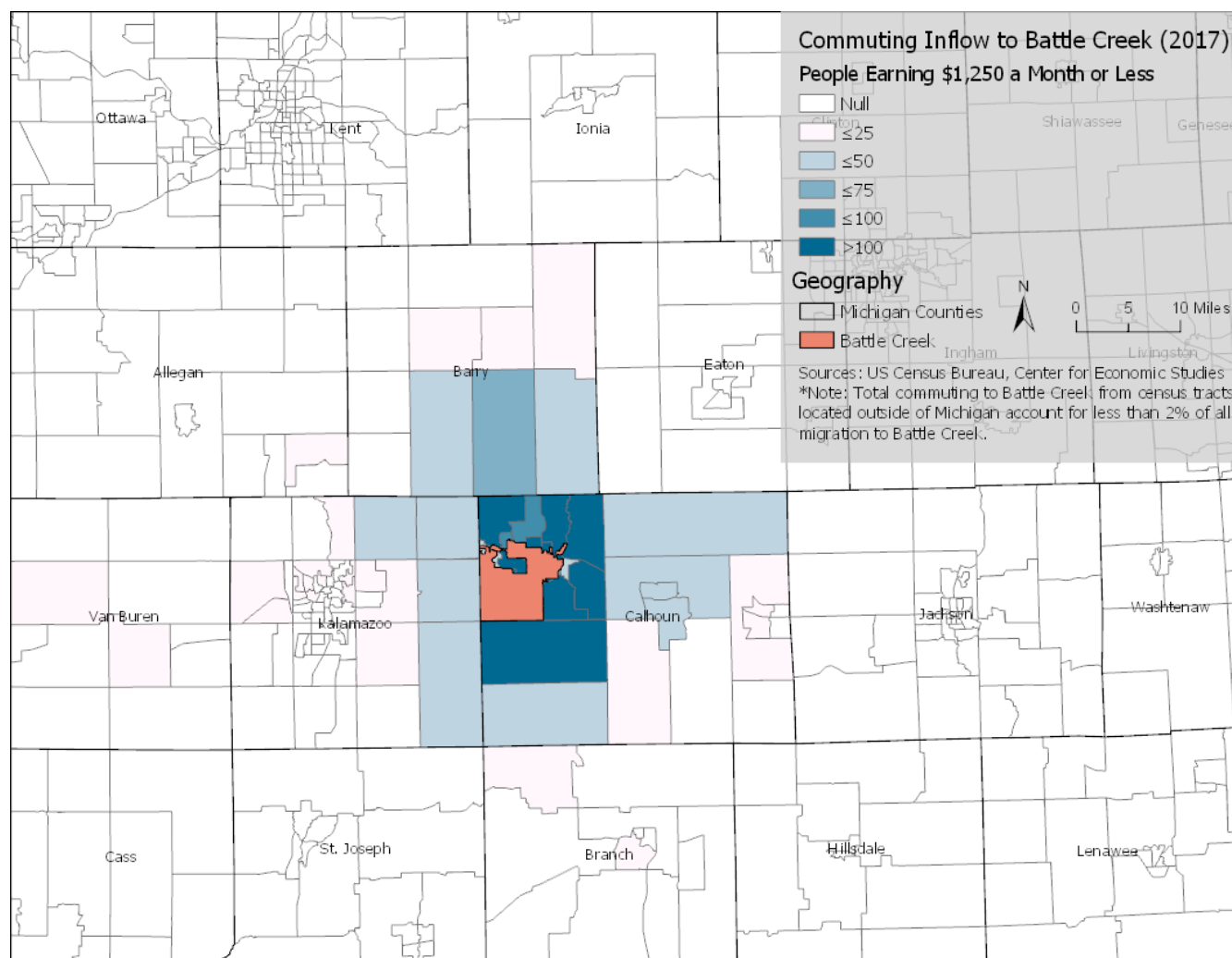
subtle. Moreover, all three income bands have outlier concentrations located near Lansing, Grand Rapids, and Kalamazoo.

MAP 6.3: Outflow of Individuals Earning \$1,250 or Less a Month



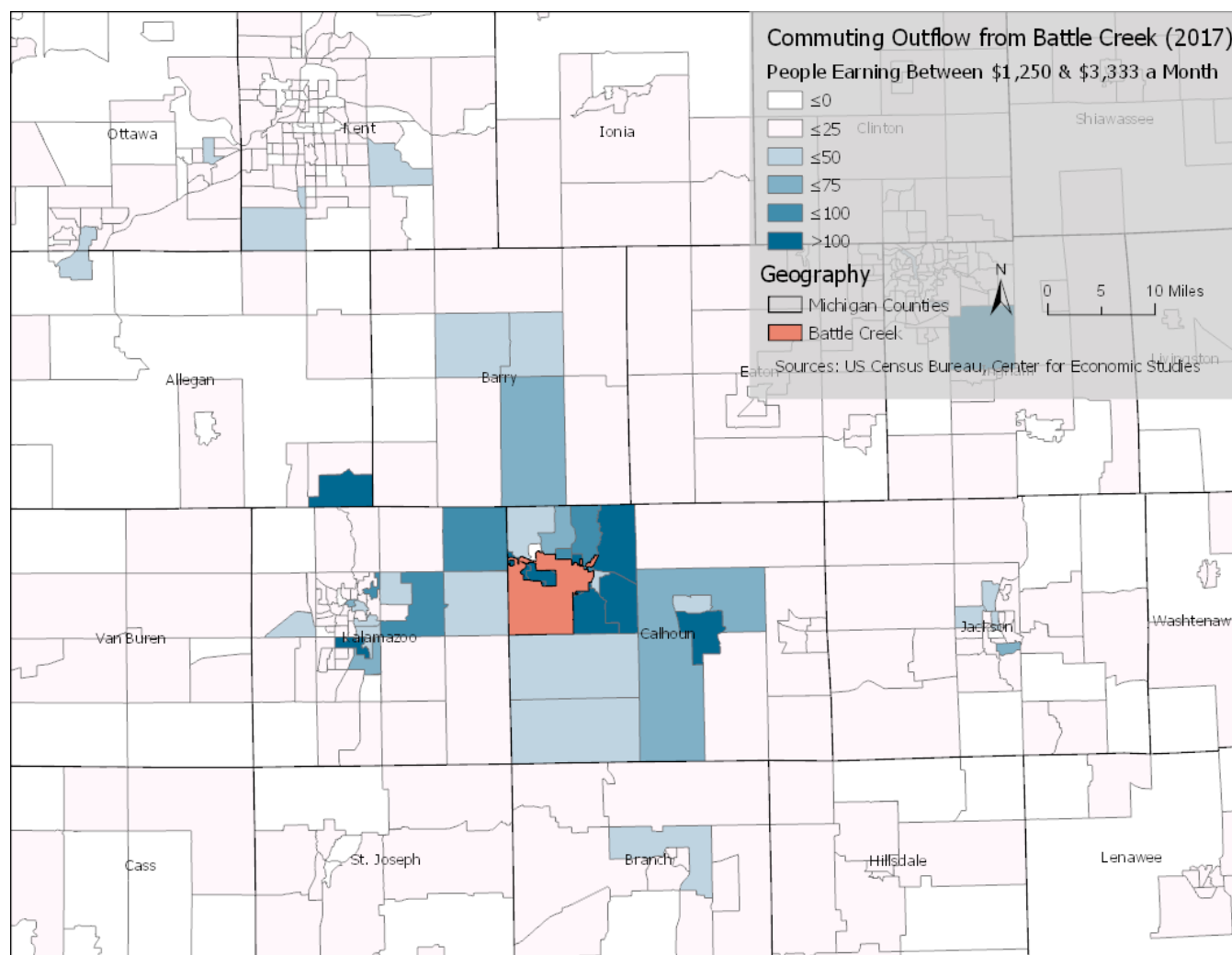
Source: U.S. Census Bureau, Center for Economic Studies

MAP 6.4: Inflow of Individuals Earning \$1,250 or Less a Month



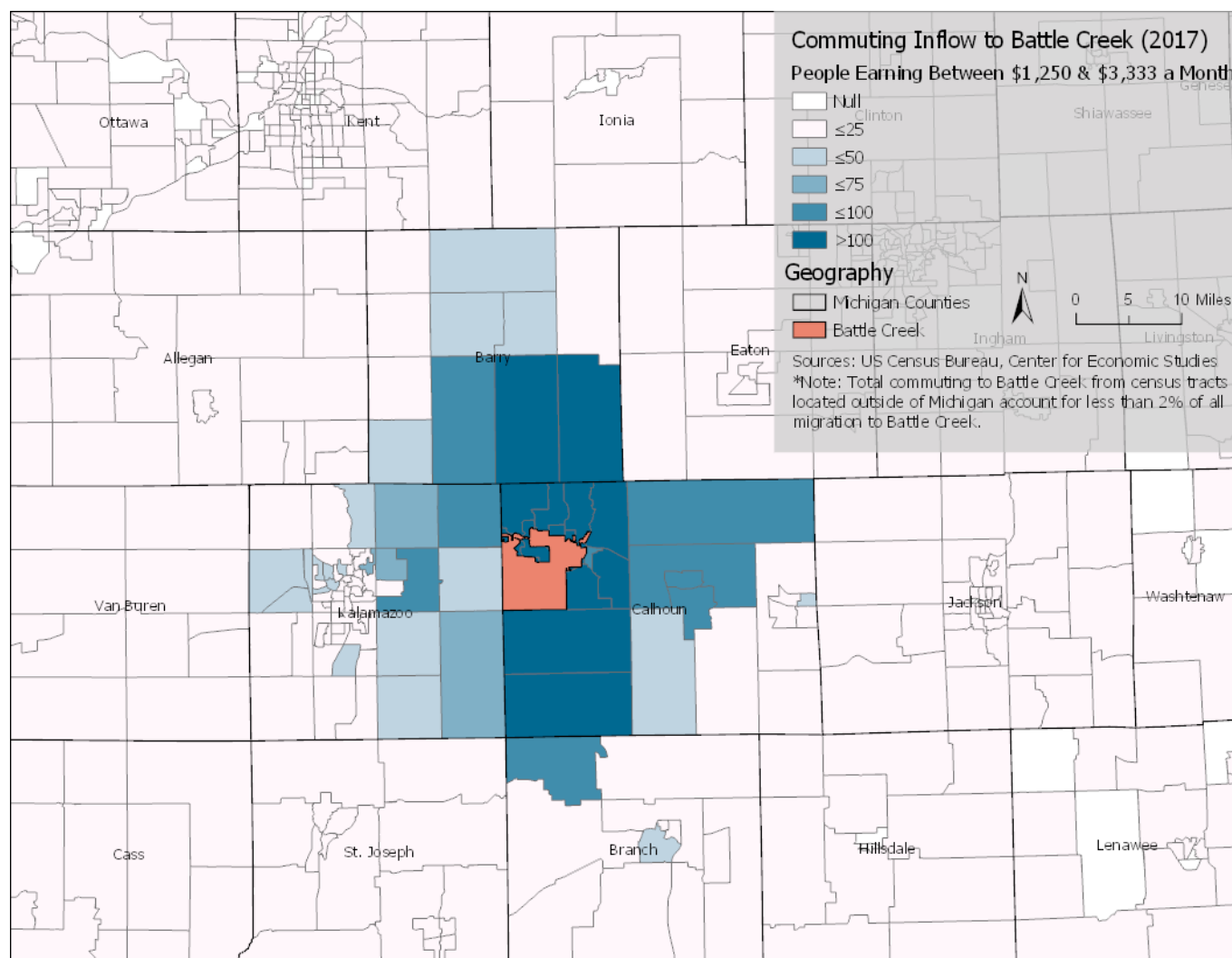
Source: U.S. Census Bureau, Center for Economic Studies

MAP 6.5: Outflow of Individuals Earning \$1,250 to \$3,333 a Month



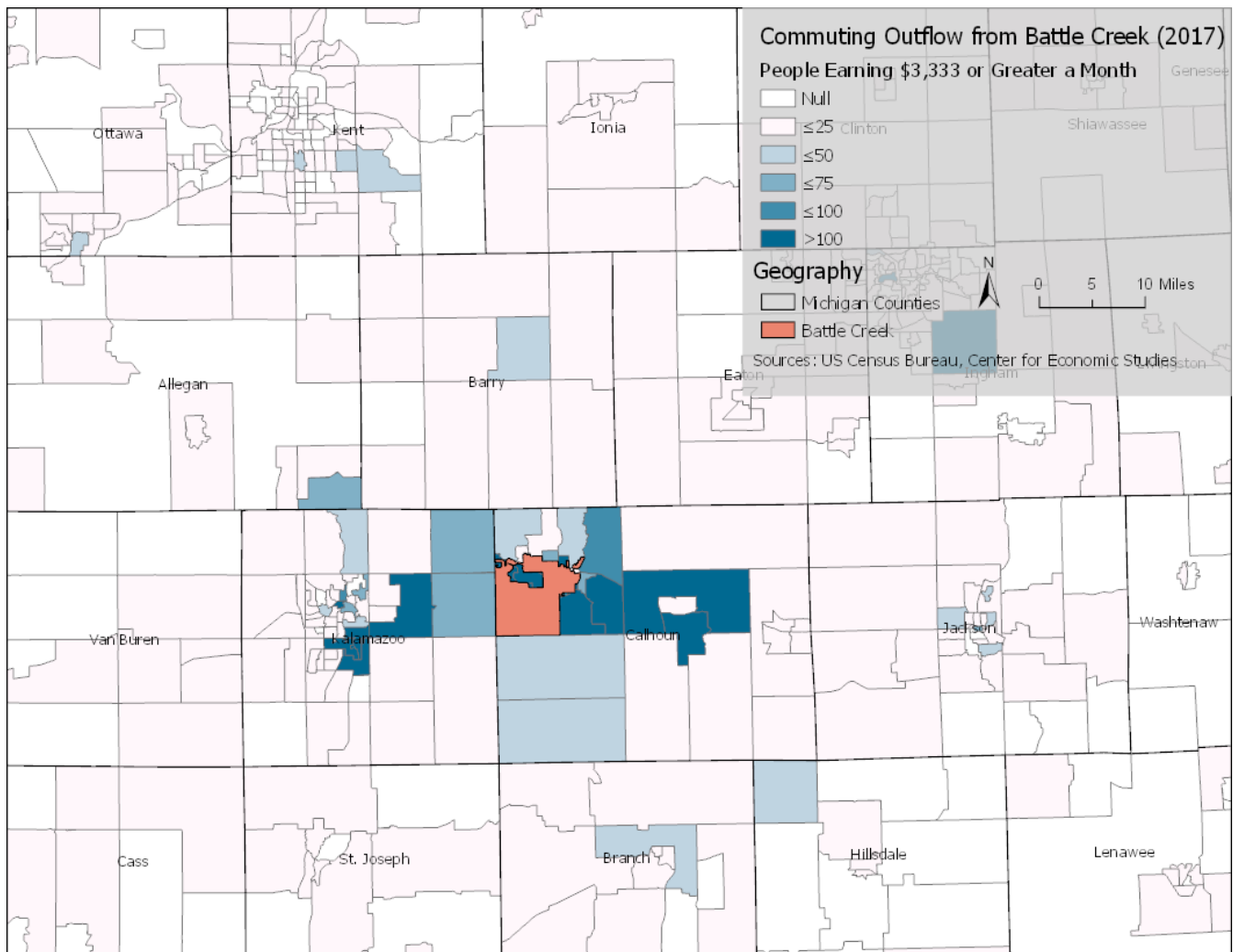
Source: U.S. Census Bureau, Center for Economic Studies

MAP 6.6: Inflow of Individuals Earning \$1,250 to \$3,333 a Month



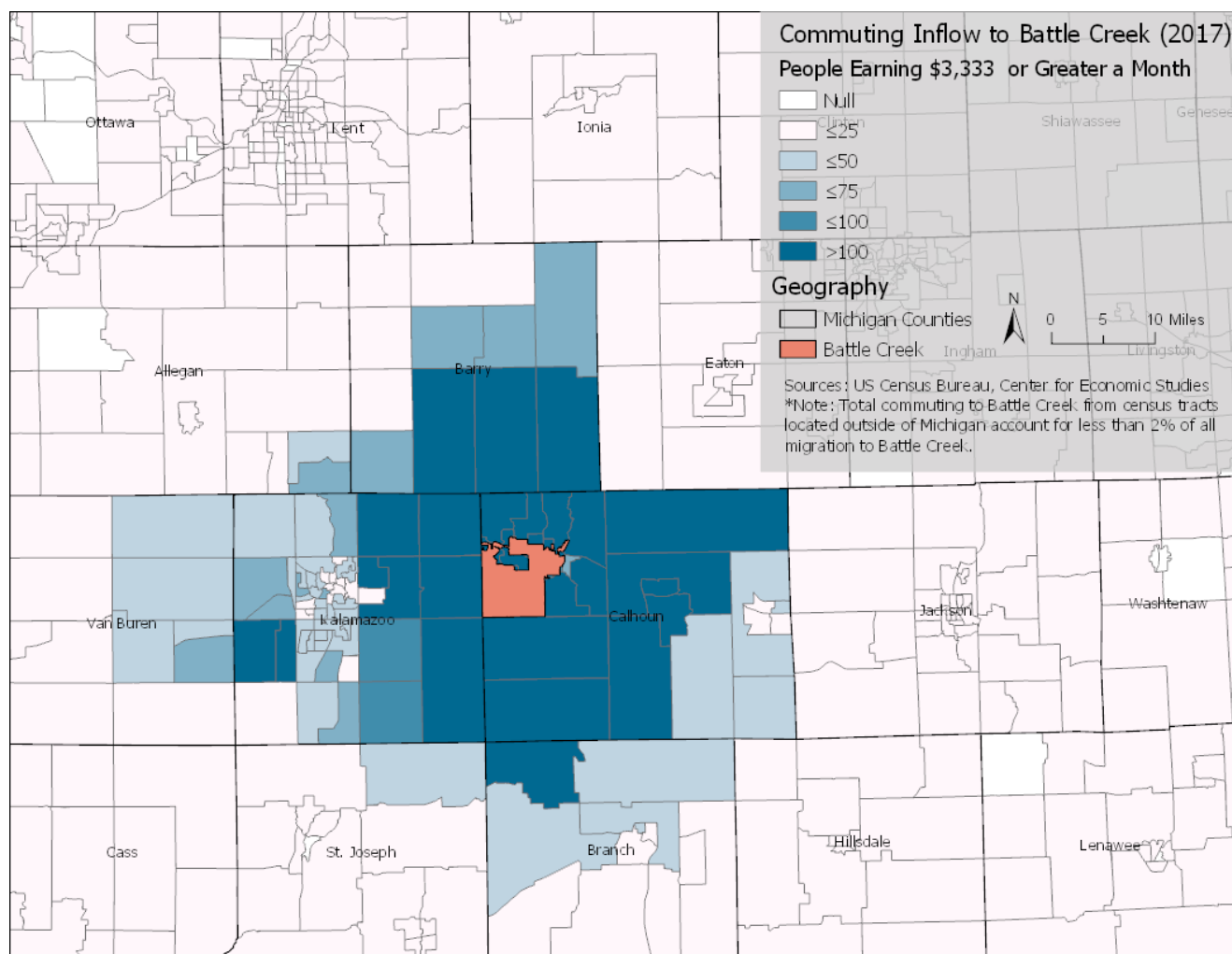
Source: U.S. Census Bureau, Center for Economic Studies

MAP 6.7: Outflow of Individuals Earning \$3,333 or More a Month



Source: U.S. Census Bureau, Center for Economic Studies

MAP 6.8: Inflow of Individuals Earning \$3,333 or More a Month



Source: U.S. Census Bureau, Center for Economic Studies

TABLE 6.2: Number of Commuters, by Income, per Census Tract

	Census tract count of outflow; earning \$1,250 or less a month		Census tract count of inflow; earning \$1,250 or less a month		Census tract count of outflow; earning \$1,250 to \$3,333 a month		Census tract count of inflow; earning \$1,250 to \$3,333 a month		Census tract count of outflow; earning \$3,333 or more a month		Census tract count of inflow; earning \$3,333 or more a month	
# of people	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
≤ 25	726	94.7	1420	97.4	780	92.4	1704	96.5	818	93	1698	94.5
≤ 50	17	2.2	13	0.9	29	3.4	20	1.1	27	3	40	2.2
≤ 75	7	0.9	3	0.2	8	1	4	0.2	9	1	15	0.8
≤ 100	4	0.5	3	0.2	6	0.7	9	0.5	6	0.7	5	0.3
> 100	13	1.7	19	1.3	21	2.5	28	1.6	20	2.3	39	2.2
Total census tracts	767	100	1458	100	844	100	1765	100	880	100	1797	100

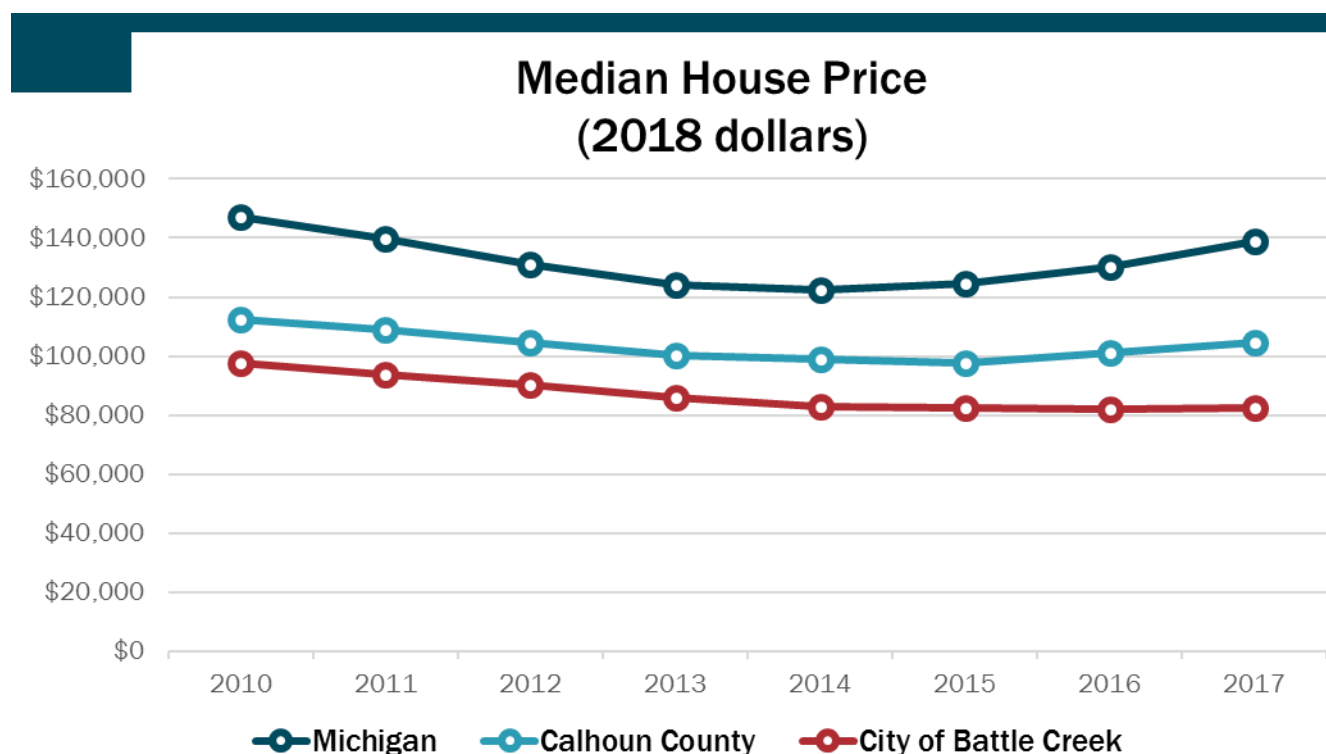
Source: U.S. Census Bureau, Center for Economic Studies

WHAT THIS MEANS: Most people commute to or from Battle Creek within a 30-minute drive of the city center, with the highest concentrations of commuters to and from Battle Creek being in close proximity (5 to 10 miles) to the city limits. Higher-wage earners are willing to travel further to and from Battle Creek for work than lower-wage earners, but those traveling from Battle Creek are not as concentrated as those traveling to Battle Creek. This is not a pattern unique to the city of Battle Creek as higher income earners generally have more reliable transportation and choice in where they live. Many high earners choose to live outside of the city center in suburbs and commute into urban areas where pay is higher. In short, higher earners travel the furthest for work, and more people commute *to* Battle Creek than *from* Battle Creek.

7. HOUSING

THE TREND: Home values in the city of Battle Creek continue to rebound, benefiting homeowners. For those unable to buy a house, affordability of rental units remains an issue.

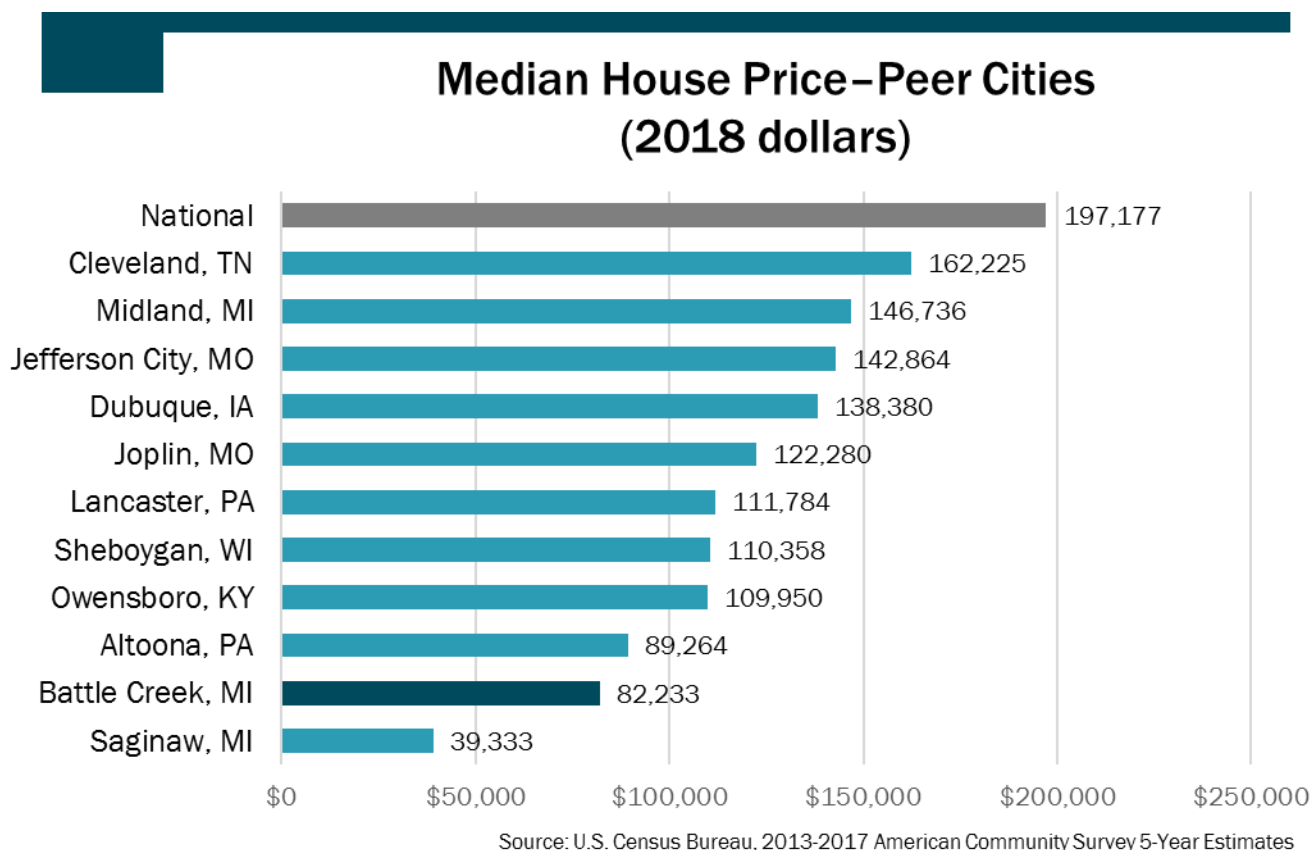
FIGURE 7.1: Median House Price (2018 dollars)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

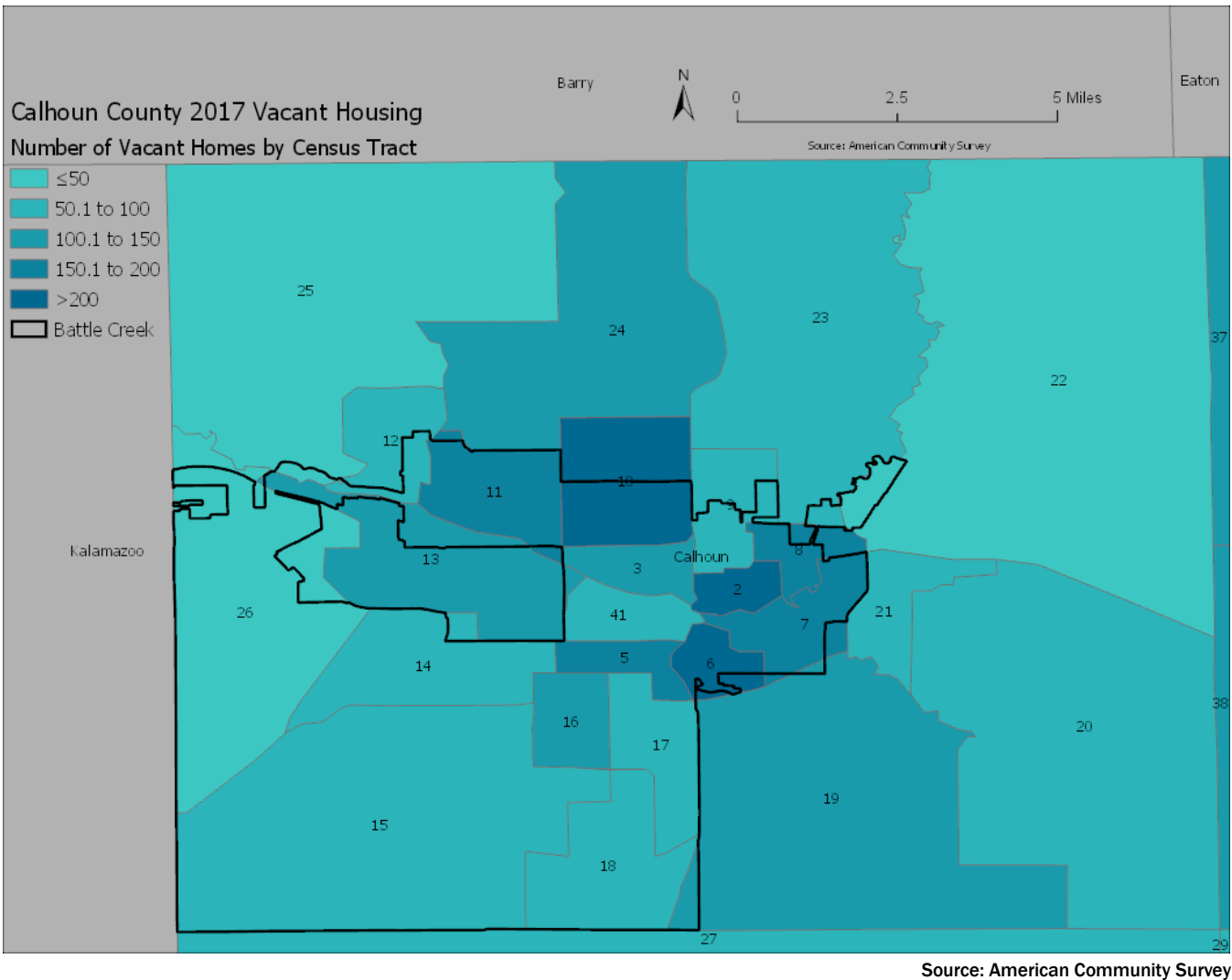
The median home price in the city, in real dollars, is much lower than that of the county or state. As shown in Figure 7.1, in mid-2017, the median home price in Battle Creek, adjusted for inflation, was \$82,233, compared to a median home price of \$104,549 in the county and \$138,991 in the state. Low housing prices have the potential to be an important asset to Battle Creek.

FIGURE 7.2: Median House Price—Peer Cities (2018 dollars)



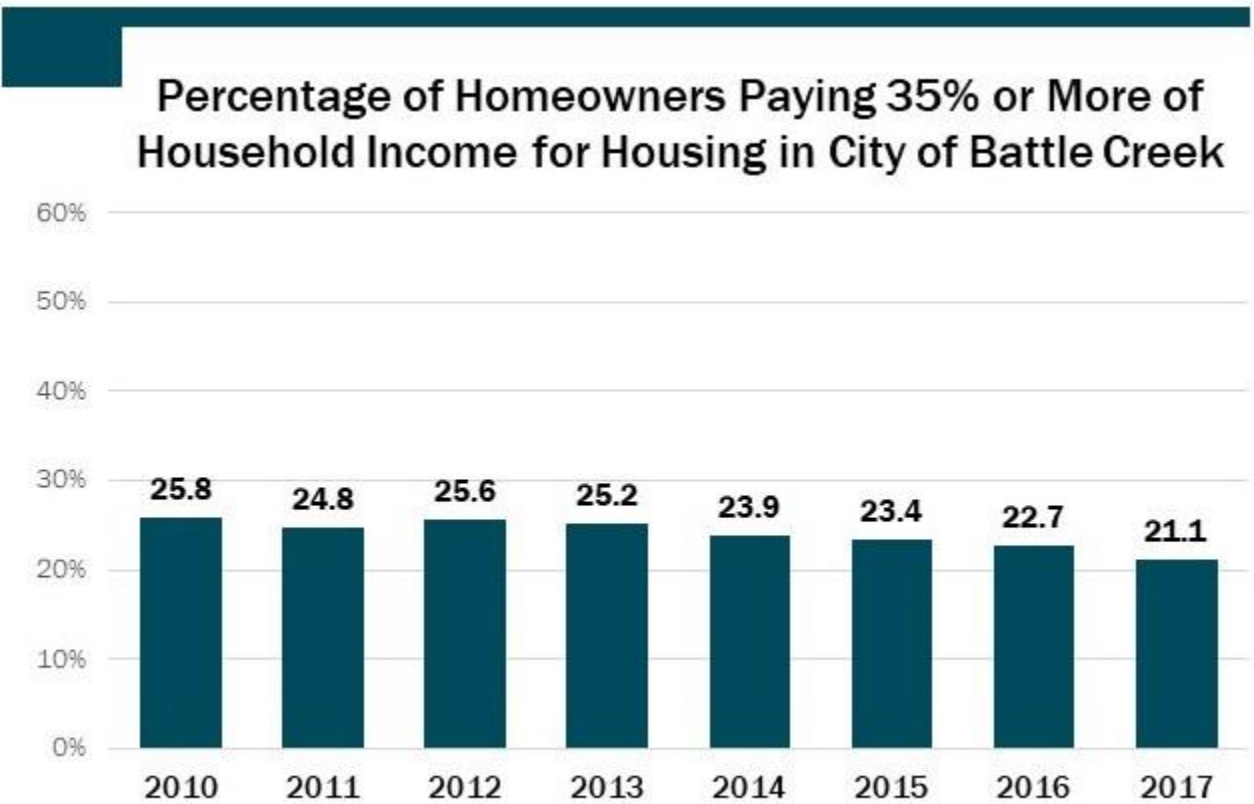
Compared to its peer cities, Battle Creek has one of the lowest median home prices: \$82,233, about 40 percent of the national median home price of \$197,177. There are many reasons for this difference. First, the housing stock in Battle Creek is quite old: almost one-third (29.1 percent) of houses were built before 1939. Second, there has been little new construction in the city: Since 2007, the average number of construction permits issued per year has been 38. As a result, few homes with new and desirable amenities are being built.

MAP 7.1: Vacant Housing in Calhoun County (2017)



The number of vacant houses in the city of Battle Creek has remained relatively steady, declining from 14.1 percent in 2010 to 13.6 percent in 2017. Part of this decrease is likely the result of a concentrated effort by public leaders to demolish blighted buildings in the city. As Map 7.1 shows, high levels of vacancy remain in certain pockets of the city, specifically in the neighborhoods near the downtown area.

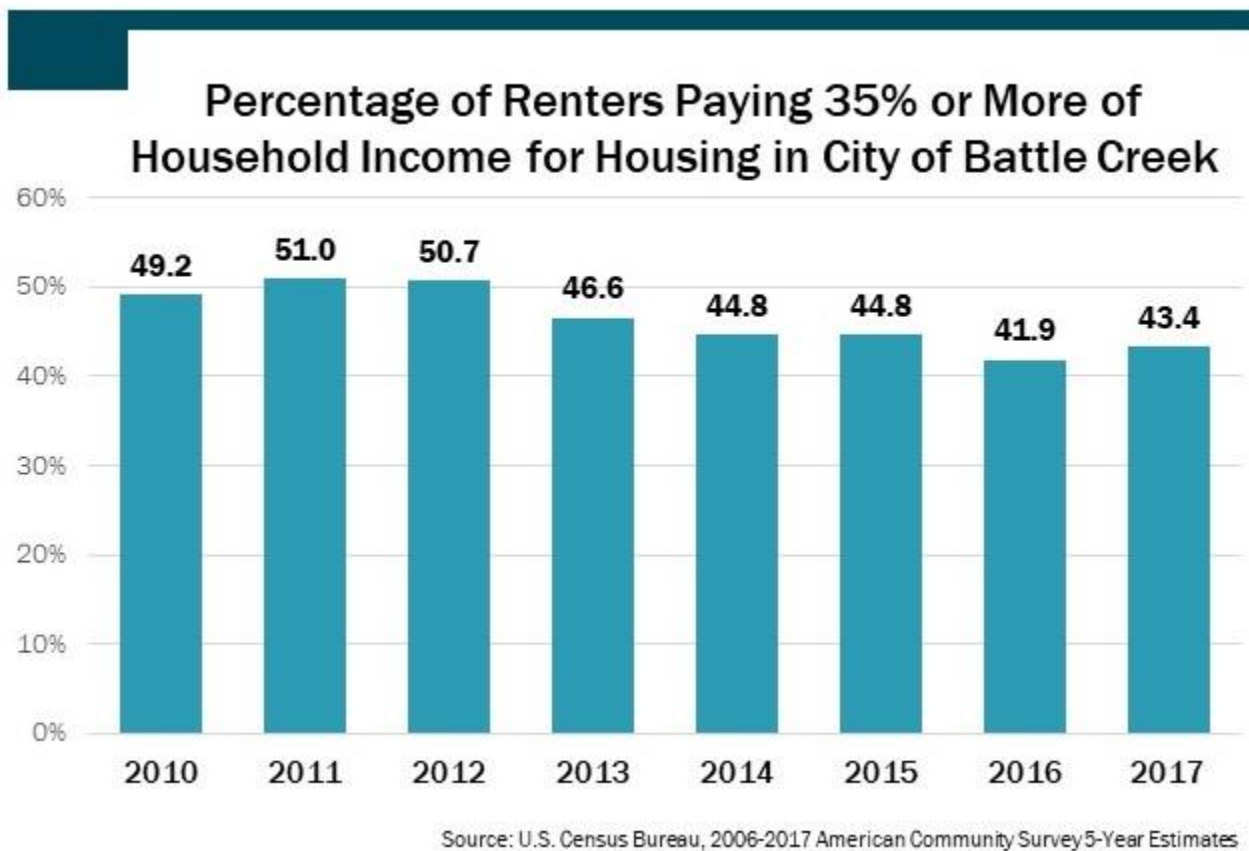
FIGURE 7.3: Percentage of Homeowners Paying 35 Percent or More of Household Income for Housing in the City of Battle Creek



Source: U.S. Census Bureau, 2006-2017 American Community Survey 5-Year Estimates

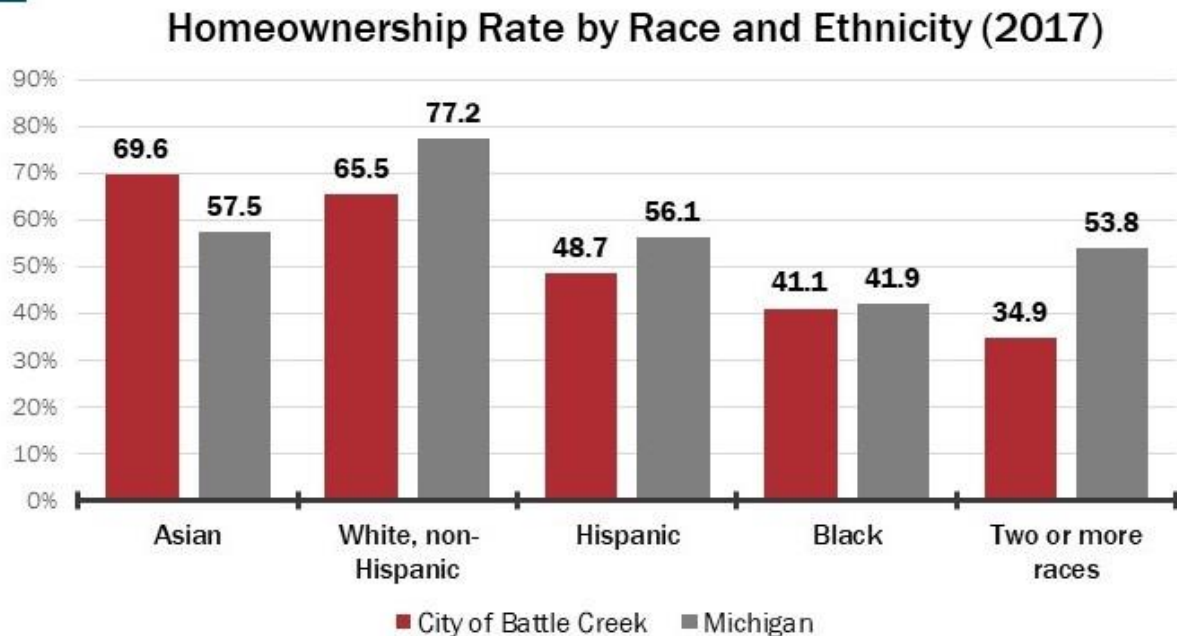
The proportion of homeowners paying over 35 percent of their household income on housing is just over one in five, or about 21 percent of all households in 2017. This is about the same as the nation (22.3 percent), but higher than the state (18.8 percent) and the county (18.6 percent). As Figure 7.3 shows, there has been a steady decline in the percentage of homeowners paying more than 35 percent of their household income on housing costs. The median monthly cost paid for homeownership in the city of Battle Creek is \$998, compared to a median cost of \$1,251 for the state of Michigan. Overall, the distribution of owner-occupied housing has stayed relatively steady within the city at about 60 percent of occupied homes.

FIGURE 7.4: Percentage of Renters paying 35 Percent or More of Household Income for Housing in the City of Battle Creek



More than 4 in 10 (43.4 percent) of renters pay over 35 percent of their household income on rent. These shares are relatively consistent with the nation (41.5 percent), the state (41.8 percent), and the county (42.8 percent). As Figure 7.4 shows, the percentage of renters paying over 35 percent of their rent has been decreasing. Since 2010, the number of households renting has increased by about 10 percent. The median rent paid in the city of Battle Creek is \$719 dollars, compared to the median rent of \$824 in the state of Michigan. Even though rents are relatively low, they exceed the reach of many of the city's low-wage workers. A full-time worker earning minimum wage would need to spend 57 percent of his or her income on rent to afford a median-priced apartment. The city of Battle Creek has one of the highest eviction rates in the state of Michigan. According to data from the Eviction Lab at Princeton University, in 2016 there were 9.98 evictions for every 100 renter homes in Battle Creek. It is also important to note that while the ACS uses 35 percent of income as a measure, a more commonly used standard is 30 percent of income. Using this measure would result in an increase in the share of households burdened by high housing costs.

FIGURE 7.5: Homeownership Rate by Race and Ethnicity (2017)



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

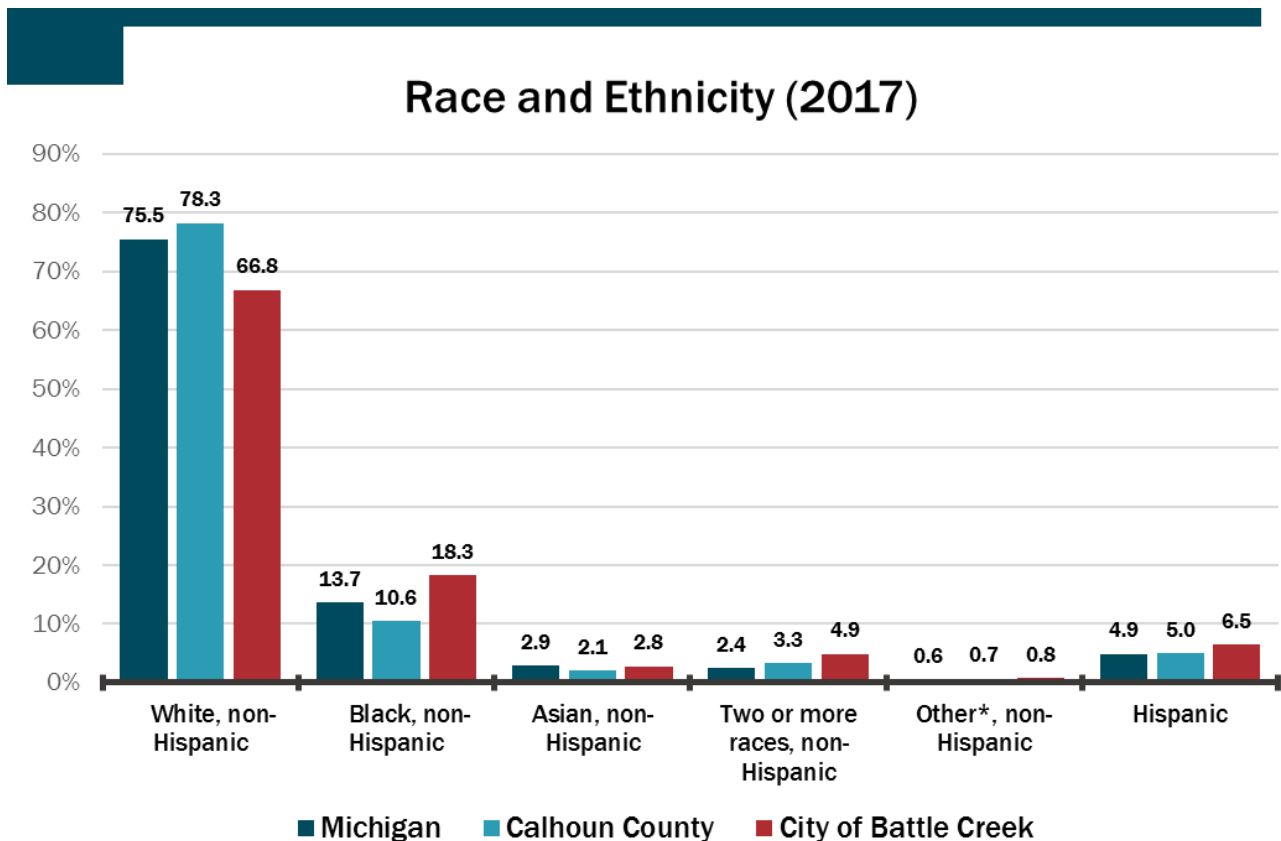
Overall, there is a wide difference in homeownership rates based on race and ethnicity. As Figure 7.5 shows, while nearly two in three (65.5 percent) of White non-Hispanic residents of Battle Creek own their homes, only two in five (41.1 percent) of Black residents of Battle Creek own their homes; that figure has decreased from 44.5 percent in 2010. Hispanic residents have seen their homeownership rate decline even more drastically, from 69.4 percent in 2010 to 48.7 percent in 2017. Asian residents have seen the greatest increase in homeownership, from 43.5 percent to 69.6 percent. For most racial and ethnic groups, the homeownership rate in Battle Creek is much lower than it is in the state of Michigan. This would suggest that, overall, lower levels of homeownership are a systemic issue within the city.

WHAT THIS MEANS: Having housing that is affordable to people all along the income spectrum is a building block of strong local economies. When workers spend more on housing, they have less disposable income for other necessities such as food, transportation, health care, and savings. They are also less likely to make purchases of nonessential goods and services, which can be detrimental to local businesses. Having a housing policy that promotes affordability can enhance the economic performance of cities, reduce spatial concentrations of poverty, and enhance place competitiveness.

8. RACE AND ETHNICITY

THE TREND: Racial and ethnic diversity is growing throughout the city, but inequitable social and economic outcomes remain for city residents based on race and ethnicity.

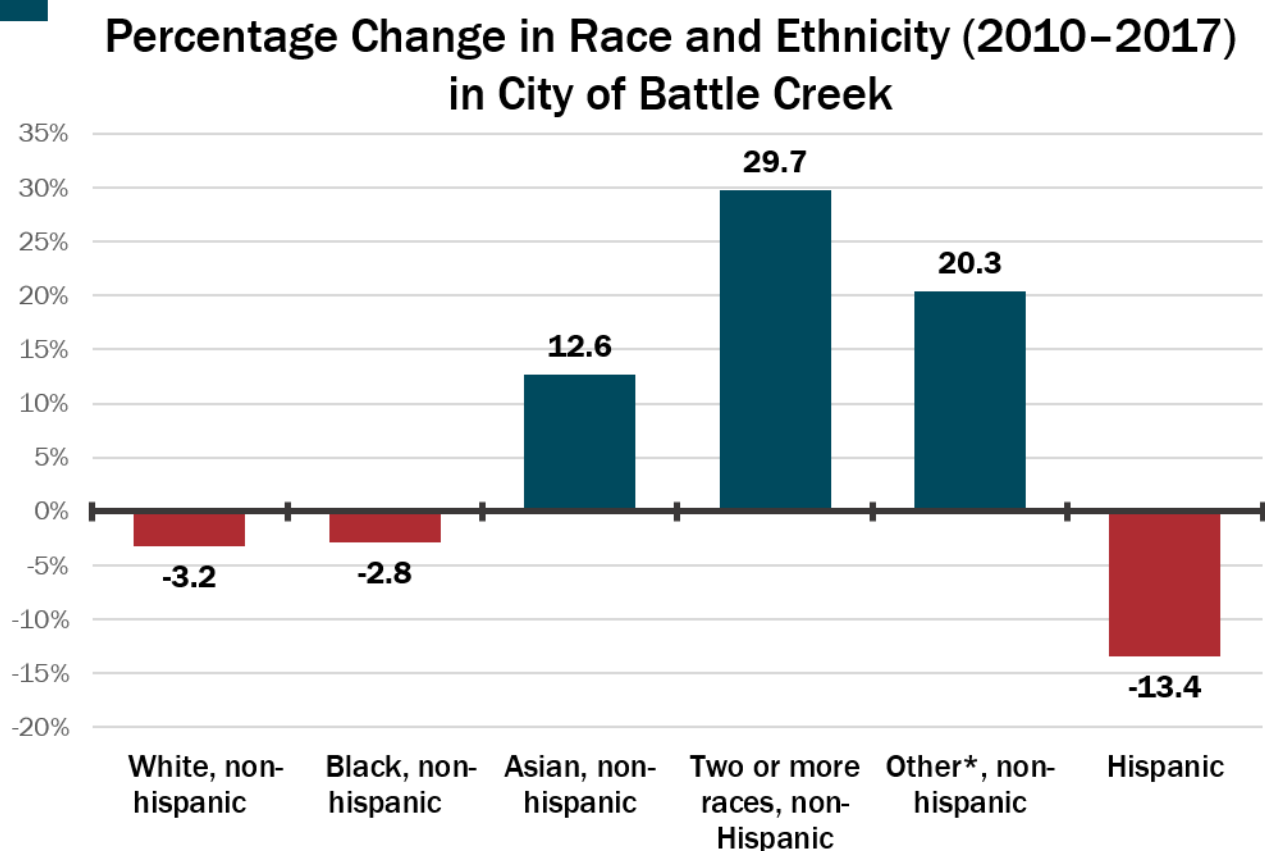
FIGURE 8.1: Race and Ethnicity (2017)



*Includes American Indian and Alaskan Native, non-Hispanic, Native Hawaiian and Other Pacific Islander, non-Hispanic, and some Other Race, non-Hispanic

The city of Battle Creek is more racially and ethnically diverse than either the state of Michigan or Calhoun County. As Figure 8.1 shows, while over three-fourths of the state’s (75.5 percent) and county’s (78.3 percent) residents are White, only two-thirds (66.8 percent) of the city of Battle Creek’s residents are White. Battle Creek has a far larger share of the population that is Black non-Hispanic (18.3 percent) compared to the shares in the state (13.7 percent) and county (10.6 percent). Additionally, Battle Creek has a larger percentage population that is Hispanic (6.5 percent), compared to that of the state (4.9 percent) and of the county (5.0 percent).

FIGURE 8.2: Percentage Change in Race and Ethnicity (2010–2017)



*Includes American Indian and Alaskan Native, non-Hispanic, Native Hawaiian and Other Pacific Islander, non-Hispanic, and some Other Race, non-Hispanic

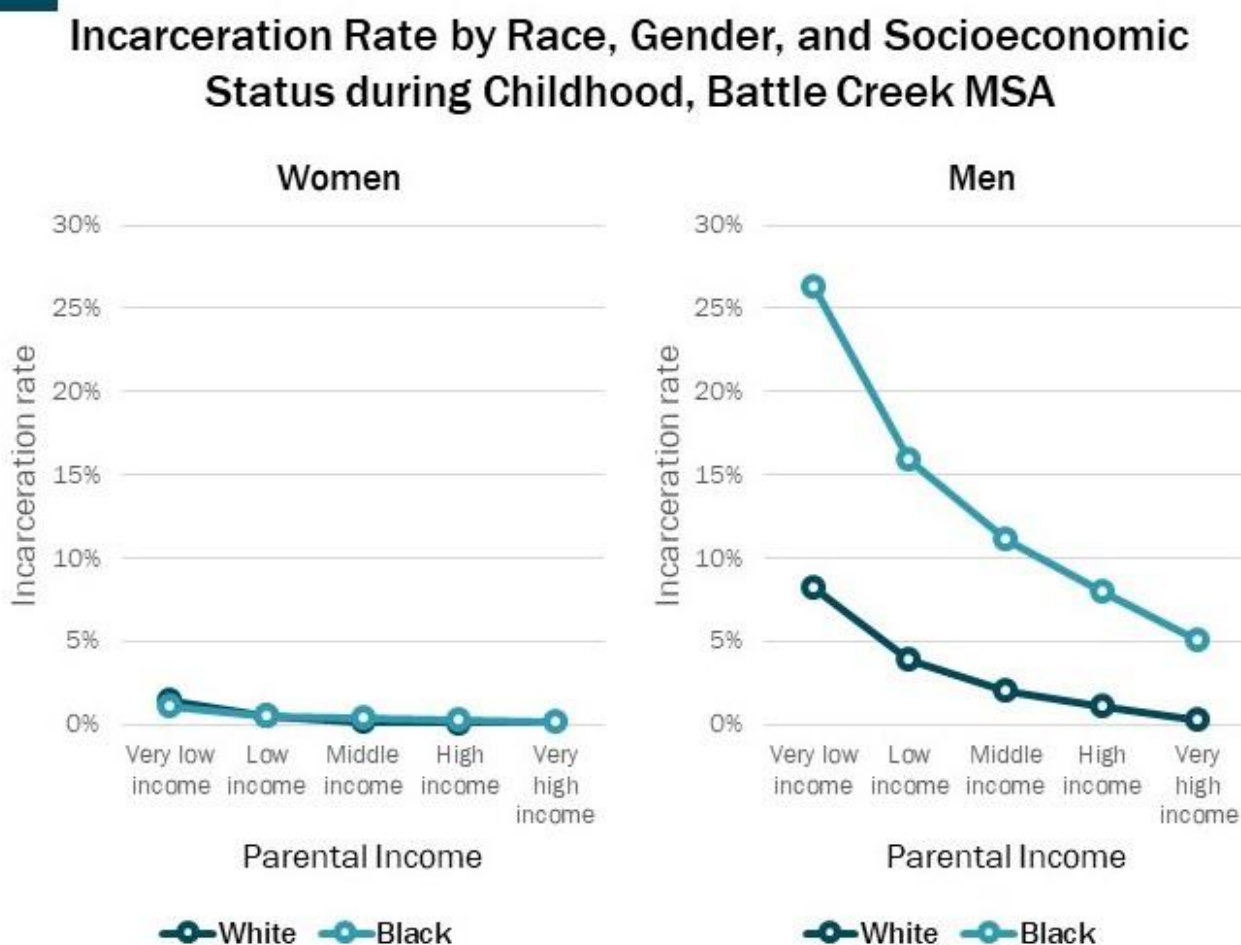
Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

There have been declines in the absolute number of White non-Hispanic, Black non-Hispanic, and Hispanic populations of the city between 2010 and 2017. As Figure 8.2 shows, the population that is White non-Hispanic declined from 35,579 in 2010 to 34,431 in 2017. The Black non-Hispanic population declined from 9,675 in 2010 to 9,400 in 2017. The Hispanic population declined from 3,838 people in 2010 to 3,325 people in 2017. Individuals who are either Asian non-Hispanic, “other” non-Hispanic, or of two or more races and non-Hispanic comprise the largest growth of racial and ethnic groups in the city. The Asian non-Hispanic population has increased from 1,265 in 2010 to 1,425 in 2017. The “other” non-Hispanic population rose from 316 in 2010 to 410 in 2017. Also, the population that is two or more races and non-Hispanic increased from 2,089 in 2010 to 2,514 in 2017. However, it is important to caution that although these groups have seen a high rate of growth, their total proportion of the racial makeup of the city remains less than 10 percent, even when their numbers are combined

Within the City of Battle Creek, there are wide disparities in socioeconomic status and life outcomes by race and ethnicity. Excluding Asians, the non-White racial groups and Hispanic ethnic group in the city are more likely to live in poverty, less likely to have a postsecondary education, and less likely to own their homes.

FIGURE 8.3: Incarceration Rate by Race, Gender, and Socioeconomic Status during Childhood, Battle Creek MSA

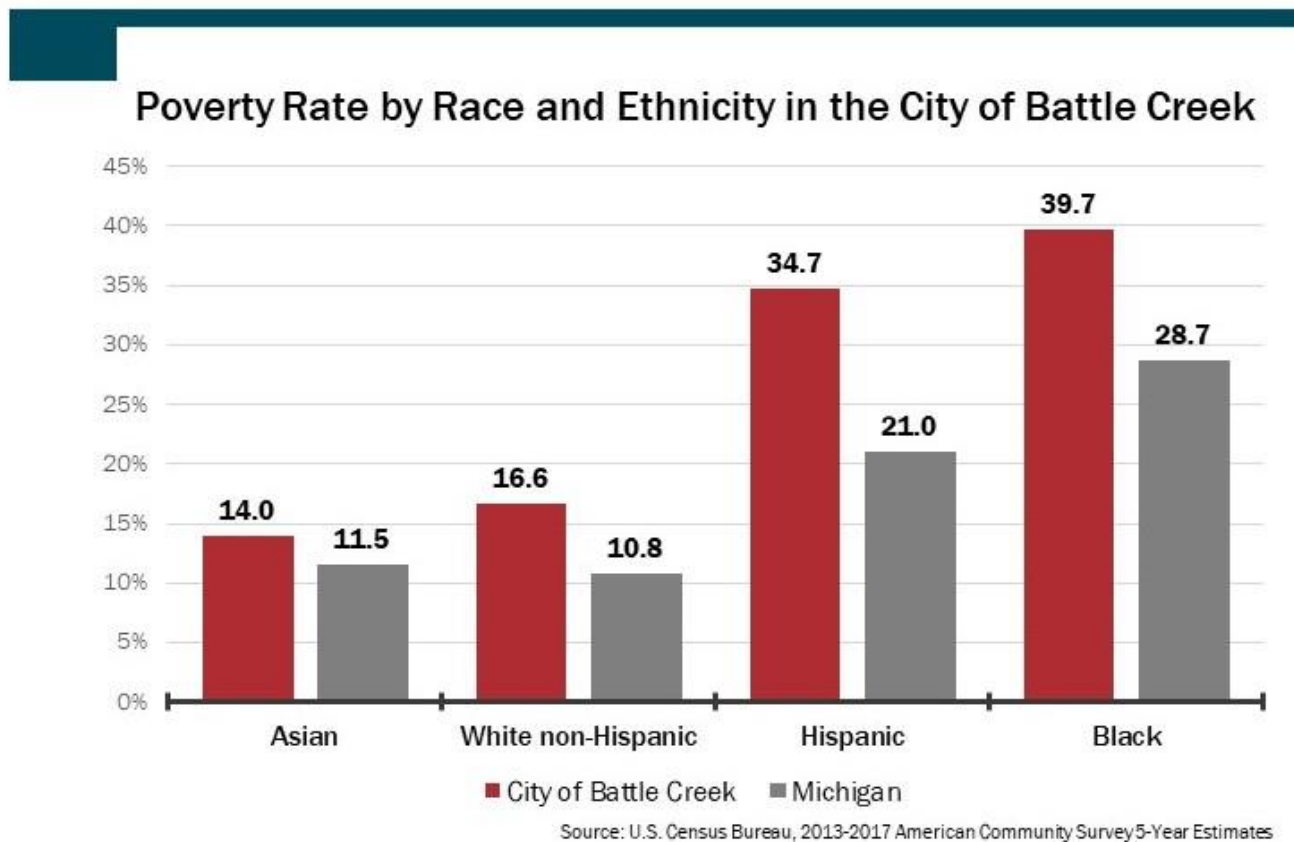


Source: Opportunity Insights, 2019

According to data from Opportunity Insights, a team of Harvard University-based researchers and analysts who work on policy solutions to empower U.S. families to rise out of poverty, on average, **Black men are seven times more likely to be incarcerated than White men within Calhoun County.** As Figure 8.3 shows, even when examining incarceration rates by socioeconomic status, Black men from similar economic backgrounds have a much higher rate of incarceration than White men. For

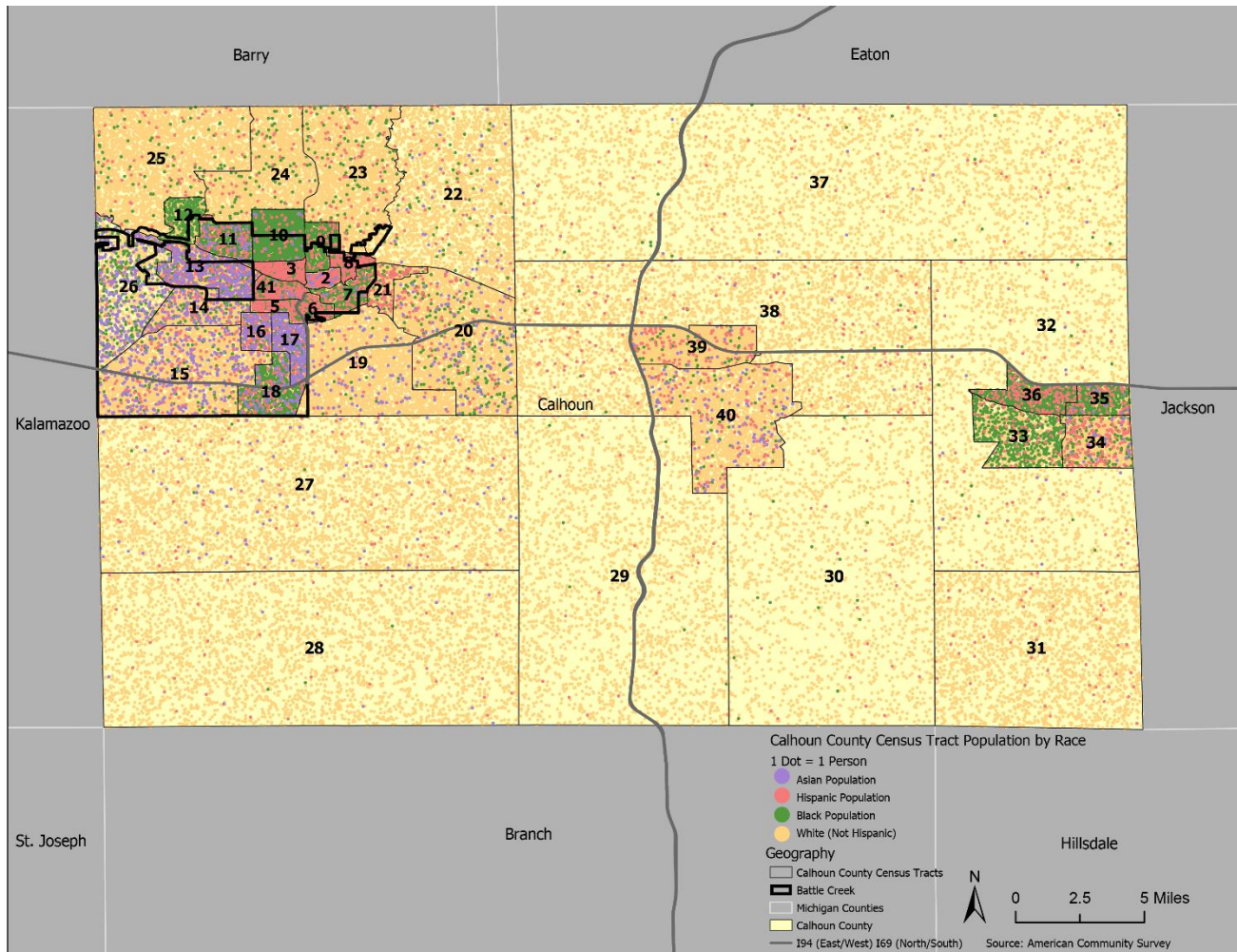
women, this difference does not exist. Having a criminal record severely limits the opportunities available to individuals in the labor market. Many businesses are unwilling to hire individuals who have been convicted of a crime, and certain professions bar former felons from holding those positions. Many of the jobs for which employers are willing to hire formerly incarcerated individuals, such as those in the food service industry, are low-paying and offer limited opportunities for advancement.

FIGURE 8.4: Poverty Rate by Race and Ethnicity



The poverty rate for Blacks and Hispanics in the city of Battle Creek is more than twice that of White, non-Hispanics, and Asians. As Figure 8.4 shows, the poverty rate for all demographic groups is higher in Battle Creek than it is for the state. Within the city of Battle Creek, 57.0 percent of Black children and 49.9 percent of Hispanic children live in poverty, while the child poverty rate for White children is 28.5 percent.

MAP 8.1: Calhoun County Census Tract Population by Race



Source: American Community Survey

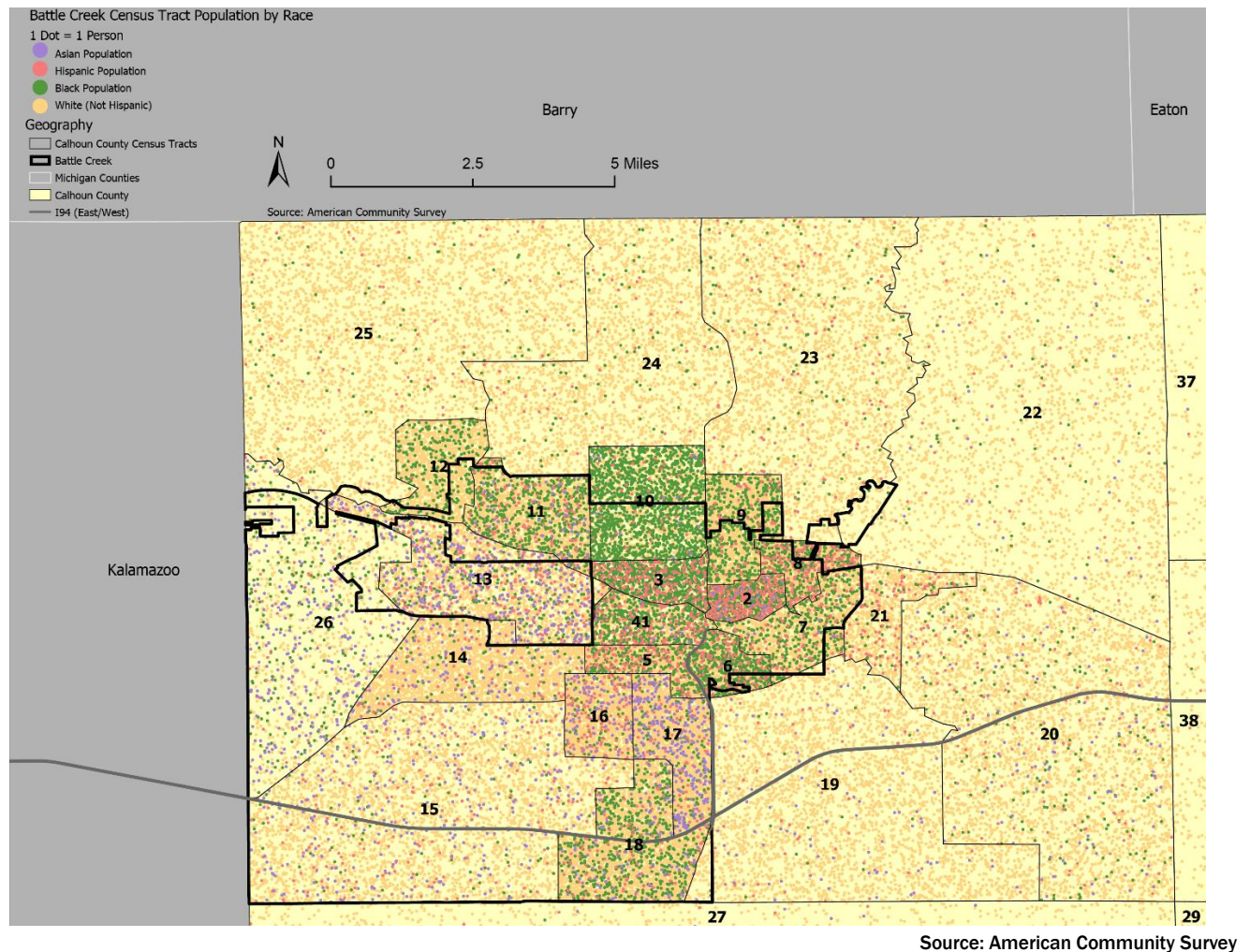
The city of Battle Creek is spatially separated by race, with non-White populations concentrated in the downtown portions of the city. Map 8.1 shows the spatial distribution of ethnicity in Calhoun County. Within the county, minority populations are heavily concentrated in both the city of Battle Creek and the city of Albion.

Map 8.2 narrows the spatial focus to the city of Battle Creek. While most of the minority populations are concentrated within a few census tracts, many of these tracts cross into other political jurisdictions. However, the map does demonstrate that minorities tend to be concentrated near the city's core.

One indicator of geographic division within the city is the “index of dissimilarity,” which measures the percentage of the non-White population that would have to move to create an even distribution of races and ethnicities across the entire city. For Battle Creek, this index has fallen from 66.1 in

2010 to 59.7 in 2017. Any number above 60 indicates that a city is highly divided. The decline shows that the city is becoming less separated, as the city has become more racially diverse, it has become less overtly divided along racial lines.

MAP 8.2: Battle Creek Census Tract Population by Race



WHAT THIS MEANS: Having a community with persistent differences between the outcomes of different racial and ethnic groups perpetuates inequities that exist within our society. Disparities between racial and ethnic groups impact issues such as economic development, labor markets, health outcomes, and educational attainment. Identifying the mechanisms to address and reverse these inequities is a pressing economic concern for the city of Battle Creek.

IN SUMMATION

The city of Battle Creek faces many challenges as it moves into the next decade. The population is shrinking making it difficult to meet the demands of an evolving economy, economic divisions exist within the city, and educational attainment is lagging, diminishing the workforce pipeline. However, the city of Battle Creek also boasts many assets including a historic downtown, higher wages than regional competitors, growing health care and manufacturing sectors, and dedicated civic partners. Addressing those challenges and building upon these strengths will require further study of the issues impacting the city of Battle Creek. Incorporating this assessment with additional forthcoming studies will yield recommendations for the city moving forward.

REFERENCES

Chetty, Raj & Hendren, Nathaniel. "The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects." Causal Effects, Mobility Estimates and Covariates by County, CZ, and Birth Cohort (2017).

Desmond, Matthew, Gromis, Ashley, Edmonds, Lavar, Hendrickson, James, Krywokulski, Katie Leung, Lillian and Porton, Adam. Eviction Lab National Database: Version 1.0. Princeton University. (2018). www.evictionlab.org.

Kirkland, David, Roey Ahram, M. Boesen, Jillian R. Sanzone, and Alexandra Freidus. "Equity and excellence in college and career readiness: Study of education in Battle Creek, Michigan." (2017).

Measure of America. "One in Seven: Ranking Youth Disconnection in the 25 Largest Metro Areas." The Social Science Research Council. (2012).

Michigan Department of Health and Human Services. "Number & Rate of Live Births and Estimated Pregnancies by Age of Woman." Michigan Health Statistics Tables. (2018).